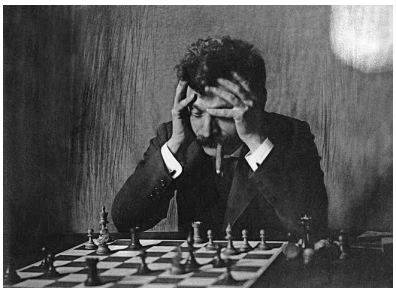
In Depth Debunk of the COTE Y1V11 Chess 'Feats'

Updated Response To Ayanokoji's CF Document By @TheHuntsman1001 , @Gabybel76 And @DAX-PMFT.
Includes Original Debunk, Huntsman's Rebunk's Debunk, Miscellaneous Statements' Debunk and Extras

By : @Farhen007 and @AGENT-ct8kv.
Agent's discord : agentct8kv

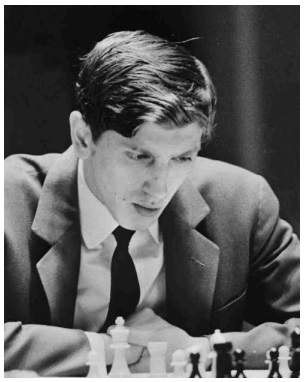
A while back, I came across the Chess feat document by @TheHunstman1001, @Gabybel76 And @DAX-PMFT. After reading the document entirely, I found many points to be erroneous and invalid according to what was stated in the light novel and some points which were contradictory to how things work in real life that were stated in the narrative. In this document, I'll highlight the issues with the CF document and how things stated in the light novel are irrelevant and bogus. Before proceeding, I'd like to inform you beforehand that I'm a USCF Higher Class/Category A chess player with 4+ years of experience and not a random geek/nerd on the internet. I'd also like to highlight the fact that with this document I don't intend to demean the work of the people who worked on the CF document respectively and I don't mean to hurt their feelings. I'll state anything and everything which is irrelevant, invalid and erroneous.

After posting my document, about a week later, Huntsman posted his 'rebunk' document in which he has allegedly rebunked all of his points. Whilst doing so, in his community post, he said that I made many assumptions and that he had debunked all 27 of my points (which is funny because at some points I agreed with him). I had originally thought that I wouldn't respond to this document because many scalers and individuals already considered my debunk valid and the 'rebunk' to be invalid. That being said, On the first two dates of February 2024, there were some events (which I won't discuss right now) which led to a change of my decision. So here's URCFD + HRD + MSD + Extras.



"On the chessboard, lies and hypocrisy do not survive long. The creative combination lays bare the presumption of a lie; the merciless fact culminating in a checkmate, contradicts the hypocrite"

~ Emanuel Lasker



“I like the moment when I break a man's ego”

~ Robert James Fischer a.k.a Bobby Fischer

Huntsman's ‘Rebunk’ Debunk + Original Debunk

> The primary criticism most people have with scaling is not knowing the exact moves Ayanokouji and Sakayanagi made during the match. However, knowing that is NOT necessary for analyzing this portion of the feat. Since first off it’s likely nobody reading this doc or analyzing this feat is advanced enough in the game of chess for that information to mean anything in how this is scaled. What I mean by this is it doesn’t matter if Ayanokouji’s best move was Nf3, Bc6, or Qd2. That information wouldn’t change anything about the feat itself. Also since the COTE author isn’t a chess Master, creating a board position worthy of that isn’t his specialty but that doesn’t detract from the feat itself. Knowing the exact moves Ayanokouji and Sakayanagi made would only matter if you analyzed their chess match, not Ayanokouji’s feat within it. Therefore, based on proven-ability scaling, everything contained in the chess feat is valid.
>
> The other main criticism of the Chess feat is not knowing the exact number of moves the two made during the game, although this is more of a misconception. While the exact number was never stated we do know the length of time the match took and how quickly each of them were taking to make moves during the different stages of the game. With that information using simple math we can estimate the number of moves made throughout the match. While that information will be semi-important for analyzing this portion of the Chess feat it is not vital.

1) The author states that "the primary criticism most people have with scaling is not knowing the exact moves that Ayanokoji And Sakayanagi made, however, knowing that is NOT important for this portion of the feat." and also states that based on Proven Ability scaling, it is valid.

This is a serious error and based on this exact error, I never used this feat to scale Kiyotaka in intellect. Knowing the exact moves is very important as we don't know what he played was a M9, M8, a move that would cause equality or just about anything. Why is this important?

Because in the later part for the document, the author scales this feat that Ayanokoji calculated better than Tsukishiro's team and the computer they had. Based on proven ability scaling, the ability that would be scaled in this case is Chess, but we literally don't have any clue what happened in the opening,what happened in the middlegame and what happened in the endgame (if the game reached the endgame; which we don't know right now but are told later). How can it be valid according to the proven ability scaling since you're scaling him on statements and narrative. You're not scaling according to proven ability but are definitely scaling on the bare assumptions and statements which are included on the narrative. As far as I know, Proven Ability = Feats + Statements, but here there are only statements and no feats.. So based on proven ability scaling this is invalid and erroneous. It would all be considered a falsification if I don't give the following examples :

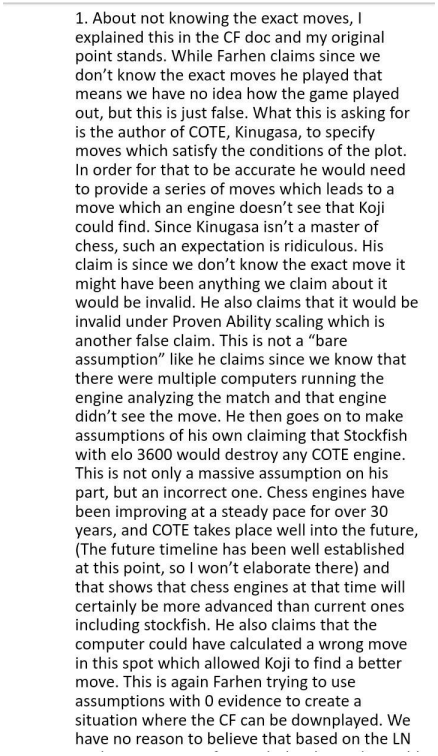
In 1998, Veselin Topalov Vs Alexey Shirov, Linares España, Alexey Shirov Played 47.... Bh3!! , A move so brilliant and well calculated that Stockfish (The greatest chess engine to ever exist that would clobber COTE verse in chess literally hundreds of times, and has an estimated elo of 3600) couldn't even see on depth 50. After relaying it this move, it immediately changed its evaluation and deemed Black (Alexey) to be winning.

A Puzzle composed in 1970 by Dutch Endgame Composer Gijs van Breukelen had a solution that Stockfish (again) couldn't see when allowed to run on depth 60 for a long amount of time. The Great Mikhail Tal was the only person who solved it in a group of Super GMs.

In TCEC 2023, Stockfish (here we go again) played a game against LC0 (another God level engine, rated 2nd in the world) and blundered in such a way that it lost the game in another 50 - 60 moves. Here is an explanation by GothamChess himself :
https://m.youtube.com/watch?v=VUC1K3UA-3Y

What can be concluded from the following examples is that engines are also limited in their capacity and make blunders and are sometimes not even capable of finding moves like humans, even though the moves humans make stem from learning ability. Thus, does it mean that Stockfish or chess engines in general are inferior to human? No, sometimes the engines are not able to calculate freely and analyze positions that can be easy for humans, And for this very reason the fact that Kiyotaka made one move better than Computer scales to literally nothing because if it was just a simple move that came from imbalance analysis, then the Engine may have calculated wrong as engines nowadays rely on pruning and not on brute force computations , and thus making it irrelevant just like our real life examples. If we had info about the moves and the game, then the story would be different (although not much). I consider this to be completely an error.

-



1. About not knowing the exact moves, I explained this in the CF doc and my original point stands. While Farhen claims since we don't know the exact moves he played that means we have no idea how the game played out, but this is just false. What this is asking for is the author of COTE, Kinugasa, to specify moves which satisfy the conditions of the plot. In order for that to be accurate he would need to provide a series of moves which leads to a move which an engine doesn't see that Koji could find. Since Kinugasa isn't a master of chess, such an expectation is ridiculous. His claim is since we don't know the exact move it might have been anything we claim about it would be invalid. He also claims that it would be invalid under Proven Ability scaling which is another false claim. This is not a "bare assumption" like he claims since we know that there were multiple computers running the engine analyzing the match and that engine didn't see the move. He then goes on to make assumptions of his own claiming that Stockfish with elo 3600 would destroy any COTE engine. This is not only a massive assumption on his part, but an incorrect one. Chess engines have been improving at a steady pace for over 30 years, and COTE takes place well into the future, (The future timeline has been well established at this point, so I won't elaborate there) and that shows that chess engines at that time will certainly be more advanced than current ones including stockfish. He also claims that the computer could have calculated a wrong move in this spot which allowed Koji to find a better move. This is again Farhen trying to use assumptions with 0 evidence to create a situation where the CF can be downplayed. We have no reason to believe that based on the LN

1] In this part of the document, they claim how the feat is still valid and why Information isn't necessary.

'This is asking the author of COTE, Kinugasa to specify moves which satisfy the conditions of the plot' and elaborates
Well, As I've already stated with examples in 1), knowing information is necessary under all circumstances. The author isn't a chess master, If So, why did he venture into an area where his knowledge is non-existent? Look, If somebody doesn't know how to cook, they don't cook. If somebody doesn't know how to write articles, they don't write articles. If somebody doesn't know how to draw, they don't draw. If somebody doesn't know how to narrate, they don't become an orator. If somebody doesn't know how to do something or isn't well versed in that field of knowledge, they don't indulge in that stuff. What I'm saying is that in this case, Kinugasa doesn't know almost anything about chess, yet he ventures into a field of knowledge where he doesn't possess the required knowledge. I don't care about the author being a master, all there is to it is that he has not explained the feat well. It's as simple as that.

'He also claims that this is invalid under Proven Ability Scaling which is another false claim'

Let me give you an insight into what Proven Ability Scaling Is.

Proven Ability Scaling is a system of scaling that was introduced by Cento (also known as CentoMC, now known as @Thus_Spoke_Zarathustra) about a year ago which stresses on the validity of feats as well as statements that are complementary to the feats. Unlike Narrative and Statements Scaling, it stresses on the 'process' of the feat. Widely regarded as one of the best scaling systems after Stop's Scaling, This system accepts feats which are realistic and

valid and also accepts statements that are realistic and complementary to the specific feats. An Example is as follows : Akiyama's Ushiritsuki Circuit Deception feat is valid in this scaling system as the feat is well explained and statements which are complementary to the validity of the feat are also explained (Like LG administrators agreeing that Ushiritsuki Circuit doesn't exist and is a very good means of getting to know the infected status of the participants)

Now we have the 'CF', what we know about the chess feat is almost nothing. We don't what moves are played, we don't know how these guys played, we don't know what computers Tsukishiro was using, We don't explicitly know what the playing strength of both players is, We don't know the type of opening Hashimoto and Horikita played, We don't know the thought process of both players and so on. The only things we know from the narrative (LN) is that Kiyotaka made a move better than computers, Arisu was lost in thought after a move by Kiyotaka, Kiyotaka had a 'winning path' before interference by Tsukishiro, Tsukishiro Intervened and Arisu sacrificed her Queen to get a M5.
None of these statements are concrete, all five of these statements are abstract. In chess, If we know what moves were played and we have the exact information by having the move list, everything makes sense because of annotations and comments by both players because we can make sense of the information provided. In this case, we have five abstract statements and nothing else. How is this valid under 'Proven Ability' then? . Nothing is as well explained as Akiyama's Ushiritsuki Circuit feat. What these guys have done is claim this is false because it is 'false' which is an example of tautological fallacy, never including details about why this is false.

'His claim is that since we don't know the exact move anything we claim about it is invalid'

The fuck? A completely wrong interpretation of what I stated. In my document, I've stated that Knowing moves is important for the validity and authenticity of this feat. When did I say that anything they claim about this feat in their document is wrong? Never, I've only stated that this is a serious error and proceeded to elaborate on why this is a serious error and why knowing moves is important with real life examples. I've never stated anything they claim about this is invalid. These guys have simply, blatantly lied about what I said and the worst part is people believed them.

'This is not a "bare assumption" like he claims since we know that there were multiple computers running the engine analyzing the match and that engines didn't see the move' and elaborates.

Yes, this is a "bare assumption" and I'll explain why.
In the narrative (LN), Tsukishiro says "I had a number of personnel and machines to account for his options". Funnily enough, The words 'engine' and 'computers' aren't even mentioned. You have brought up an engine from nowhere which is supported by 'machines', (computers Isn't stated) and 'personnel'. This abstract statement by Tsukishiro doesn't even include engines and computers. And it isn't even stated whether these 'machines' are all contributing towards one engine (which by the way is deadass horrible to claim as I've shown later) Or if they are all working individually. This is completely a bare assumption. You have created imaginary statements to support your claims.

‘He then goes on to make assumptions of his own like claiming that stockfish with 3600 elo will absolutely destroy any COTE engine. ‘ and proceeds to elaborate.

None of this is an Assumption. Everyone already knows the fact that you guys have created imaginary statements and modified Tsukishiro's statement in the LN to such a major extent that it seems as if he has multiple computers working on one engine with words such as ‘engines’ and ‘computers’ not even being mentioned. The word ‘machine’ in this context can also be understood as a smartphone. Arguments like ‘But Ayanokoji is the masterpiece of WR, you think they'd use smartphones for analyzing his game?!!?!!’ won't work as the meaning of the word ‘machine’ is subjective in this context. This is also the reason why I'm right and these guys are wrong. They simply created imaginary statements and modified Tsukishiro's statements to fit their needs. Before you guys start pumping up discord bot translations, here are two other sources in which the word ‘machine’ is used and something like ‘engines’ isn't mentioned.
https://online.anyflip.com/sbxxv/tmoq/mobile/
Here, the page is 268.
Keep in mind that here Tsukishiro says ‘a dedicated machine’, not even ‘machines'.
https://online.fliphtml5.com/xgemm/hgkm/
Here, the page is 445.

‘Chess engines have been improving at a steady pace for over 30 years and taking into consideration that COTE takes place in the future, any COTE engine would be considerably advanced than current ones including stockfish. ’

Massive assumptions, lack of information and wrong information have been combined here. I'll explain everything briefly. True, Chess engines are improving at a steady pace. But there are some things deadass wrong here. Firstly, you completely disregarded the advent of AlphaZero. In 2017, the DEEPMIND team at Google created AlphaZero, an AI chess engine. It was then put against Stockfish which was the strongest engine at the time. AlphaZero won the match by a landslide and didn't lose one single game. This caused a massive uproar about the credibility of chess engines playing strength and thus it was found that the strength of engines really hasn't increased but only their memory retention and calculation capacity have been increased. No good work was done on pattern recognition, strategic improvement, efficient plan creating, linear calculations and divergent calculations of engines. Engines were horrible at the concept of finding Candidate moves. After the humiliating loss of Stockfish in 2017, more work was done by developers on the mentioned categories and after that it has been seen that playing strength, calculation capacity and results of engines has increased in contrast when put forward against AI engines like AlphaZero and LC0. Still, their perception and replication of human play is very bad.
This shows that the playing strength of engines hadn't really increased that much. After 2017, the playing strength of engines has increased minutely over the years. In fact, Stockfish 16 is only estimated to be better than Stockfish 15 (previous version) by only 30 or 20 rating points considering the computers of both engines to be the same. Here's proof of my statements:
https://youtu.be/WOxKJnmOVvU?si=UtNBp90qm2fJBaDQ
https://youtu.be/8dT6CR9_6l4?si=tMWq5TGmtyhAwyml

Here's another link about the history of chess engines:
https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://en.m.wikipedia.org/wiki/History_of_chess_engines%23:~:text%3DFinally%2520in%25201995%252C%2520a%2520new,Kasparov%2520for%2520the%2520first%2520time.&ved=2ahUKEwjDup2ZkbCEAxWhTWwGHTDgAcwQFnoECBEQBQ&usg=AOvVaw3YTJY23TMo-QL7qdXsxghl
Now, there's also the thing where computers are horrible at replicating human play. I've included many examples about this, but I'll also leave one here.
https://www.reddit.com/r/chess/comments/su9ctd/why_are_chess_engines_still_so_horribly_bad_at/

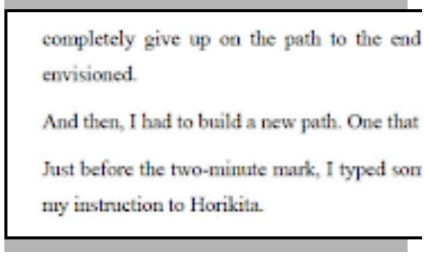
So, the best chess engine until 2030 will essentially be almost around the same strength unless some new mechanism for increasing its strength is found, and there's also the fact that engines aren't released weekly, monthly, or even annually. The best engines like Stockfish, LC0, Torch etc are updated from their previous versions after 2 - 3 years and so on. We are currently in 2024. Their improvement in playing strength is also minutely better than before. But all this and what is related to the timeline is of little importance here due to reasons I've shown later in this document.
Now coming back to the CF, as we already know that the word 'engine' isn't used and words like 'machines' are used instead of 'computers'. (This has been given a bit more attention in 11]). This prevalence of ambiguity and lack of concrete statements is the reason why Current Stockfish would almost obliterate any COTE engine and the whole verse in chess. Another minor reason why this is true is because of the timeline, there is no future timeline, these guys have lied about that too. Refer to 2}. The timeline has little relevance to what we've put forward.

'He also claims that the computer could have calculated a wrong move which allowed Koji to find a better move. This is again Farhen trying to use 0 evidence to prove his point. '

See, it's either the lack of information these guys have or them simply trying to insult me. In my original document, I've given four examples here to show what I'm trying to say. Later on, I've literally included a complete article called '10 positions chess computers don't understand' in 17) and also shown in my document how some positions are not understood by engines, regardless of their playing strength. These guys didn't even read the whole thing and are addressing points while reading them for the first time. I can already tell that.

What these guys have done in this part of the 'rebunk' document is to completely disregard the examples given and validate their claims by stating things such as 'that such a thing is impossible for Kinugasa since he's not a chess master', lied about what I've said and create imaginary statements to prove their points. Again, They have 'rebunked' their points by stating 'that Kinugasa isn't a chess master', misinterpreted what I've said or simply lied about it, created imaginary statements and completely disregarded the examples. The fact that they stated 'This is again Farhen trying to use 0 evidence to prove his point' when I literally included real life examples and a whole article in my document. The fallacy they've committed here is known as Dismissal, Straw Man fallacy, Ad Hominem and Quick Generalization. My point remains.

To put simply, Ayanokouji made ‘x’ number of moves made in a time span of 17 min → ‘x’ = 60/15 = 4 moves per minute x 17 minutes = 34 moves each | ‘x’ = 34, so Ayanokouji and Sakayanagi each made about 34 moves in this span of 17 min which total to 68 moves. It is directly stated that they both took ~15s for each move. As seen above, Ayanokouji affirmed that at the end of the 17 minute span, he already KNEW what move Arisu would make under normal circumstances (meaning without Tsukishiro’s intervention), which means that he had predicted her 34 moves up to that point, and already had a winning strategy, proving that he predicted more than these 68 moves in total, here is the proof:


completely give up on the path to the end envisioned.

And then, I had to build a new path. One that

Just before the two-minute mark, I typed son my instruction to Horikita.

2) In this part of the document, the author has done some math which by the way is completely spot on and free of errors and correct, denial to the math would be questionable, here 34 is the total no. of moves made by both sides and 68 is the no. of plies (half moves, moves made by only one side at a time) ; But later says that "he already knew what move Arisu would make under normal circumstances (without Tsukishiro's intervention) which means that he predicted her 34 moves up to that point and had already a winning strategy"
This is completely wrong, because in the light novel, Kiyotaka States that "Even after the match went past the halfway point, instead of opening the gap between us and spreading my tiny lead, I took the full extent of my ability to prevent her from closing in on me"
Kiyotaka is saying that instead of trying to take risks that would help him gain more advantage and extend his tiny lead, he used all of his ability to 'prevent her from closing in on me' which means that he didn't give Arisu any chance to attack and played defensively since he has the clock on his side and Arisu most definitely would falter under time pressure. Also, where is it stated that Kiyotaka predicted her moves? If the author deduced this, from which information did he deduce?
Also, did we forget that 34 moves is just the transition from the opening to the middlegame? Even Class B (USCF GRADE) are capable of replicating this feat, that is to predict an opponent's moves. While 34 is certainly a bit exaggerated, 25 moves would be reasonable and FMs (~ 2200 elo) would definitely replicate this exact feat with no difficulty.
"And already had a winning strategy, proving that he predicted more than these 68 moves (he means half moves) in total"
No, this is also wrong. First of all, in chess there is not a winning strategy, after the opening there is a correct strategy which is complemented by a winning plan. It should be kept in mind that there is only one correct strategy but there could be many winning plans. Earlier Kiyotaka said that he did the best of his ability to prevent her from closing in on him, He never said that he had a winning strategy. Only after Tsukishiro interferes with his move, he decides

to go for a winning plan (stated in "then I had to build a new path, one that would lead me to victory"). Earlier, he was more concerned with playing a balanced game and not giving Arisu any specific imbalance which would prove fatal later in the course of the game. Also, How does having a winning strategy or plan mean that Kiyotaka predicted her moves? It means that she must've made a mistake/blunder, nothing else but thinking that having a winning plan proves that Kiyotaka predicted her moves is utterly wrong. Take an example of any sport other than chess, If a team wins in soccer or football by outscoring the opponent team, does it mean that they already knew what their opponent was going to do? No.
Kiyotaka states "Just before the two minute mark, I typed something into my keyboard and sent my instruction to Horikita"
Blud himself doesn't know what he wrote (Sorry this is a joke don't take it seriously)
In this part of the document, there are several invalid facts (which I just stated) and a grave misunderstanding of what Kiyotaka said but nothing that could be considered a serious error except the fact that the author assumed he predicted all of her 34 moves which is very easy to do but is also not stated anywhere in the LN. We'll let this much slide otherwise the whole thing will be contradictory.

-

2. Here I'm glad you understood the math, so I won't have to address that. He then explains the difference between moves and plies (half moves) which doesn't change anything with regard to this part of the doc since that was already explained. He then moves on to claim that Koji having predicted which moves Arisu would make was wrong because he was using his full skill to stop her from gaining any ground. For someone who claims to understand high level chess he doesn't seem to understand that even one wrong or flawed move is all it would take for a high-level player to claim an advantage if they spot it. Koji knows how skilled Arisu is at chess based on how she is playing so he determines that even one mistake on his end could lead to her claiming an advantage. This same thing can be seen replicated in GM play where just one move is enough to claim an advantage which lasts the remainder of the game.
https://www.youtube.com/watch?v=j-f6kSxnl9M&list=LL&index=1

He then claims that this 34-move section is the transition from the opening to the midgame which made me realize something interesting about Farhen which I would see more of later. While based on his doc it is clear that he understands chess well, the same cannot be said for the COTE LN. Since in the LN Hashimoto and Horikita had been playing this match for close to 20 minutes before Koji and Arisu took over, meaning the opening part of the match had long since passed. This was only the first time Farhen would misinterpret the LN in this doc, and I will note more times later. He also claims there is no "winning strategy" in chess, and this has a little truth to it. While there is no

2] In this part of the document, the author seemingly validates his points about Kiyotaka's predictions and proceeds to elaborate.

'He then explains the difference between moves and plies (half-moves) which doesn't change anything with regard to this part of the document since that was already explained'.
No it wasn't, you guys completely didn't explain the difference between moves and half-moves, that's why I did it. Where have these guys explained the difference between

moves and half-moves in their document? No where, and yet they said ‘since that was already explained’.

‘This was the only point where Farhen misunderstood the LN’ and proceeded to elaborate. This is one of the two minor mistakes that I've made in my document, I've assumed that 34 moves is the transition from opening to middlegame which is true in normal circumstances but not in this case since Koji took over Horikita and Arisu took over Hashimoto playing this game. That being said, everything else that I've included in the 2) part is completely valid and relevant except this mistake which I've admitted myself.

‘He also claims that there is no “winning strategy” in chess and that has little truth to it.’ Here, these guys have only included a part of the statement that I've made in order to refute it. What I said in my document was that ‘There's no winning strategy in chess. There's only a correct strategy which is complemented by a winning plan. While there can be many winning plans, there's only one correct strategy’. It wouldn't be wrong to say this went completely over their head. The fact there's only one correct strategy but there could be many winning plans is accepted by every school of chess, From the Russian school, To the Hypermodern school, From the composite American school to the previously Soviet school, everybody agrees on this fact. Besides, as we are not talking about the opening here, the matter is completely different. In the opening stage, there are many strategies that can be followed and many plans to complement each strategy. This is not the opening part. I'll still show an example to prove my point.



As one can see in this position, White is very ahead of Black in development. White enjoys an excellent spatial advantage in the center as well. His King is also castled and both of his minor pieces are out. In contrast to this Black's king is still in the center and he has wasted two tempi on making random flank pawn moves. He has no spatial advantage and he's far behind in development. An experienced player can immediately grasp the situation and use these to his advantage. Black king is still in the center (thus susceptible to attack) and White king is already castled (thus much safer). Black has no space while as White has a good spatial advantage. Black lacks development while as White has already developed all of his pieces. By following *Silman's theory of imbalances*, one gets the thing right in his head.

Naturally, White is better in this situation and is trying to attack since he has the advantage. An experienced player immediately notices how to attack by using Strategic intelligence and knowledge.

White's Strategy :
Using his lead in development to attack Black.
Notice the very weak f7 square and how his bishop and rook are aligned at it.
Black's misplaced pieces as in this case his dark squared bishop would be much better back on f8, and his g6 knight would be much better at f6 since then it blocks the rook's vision etc

This is the only correct strategy at this point. If White were to slow play with Be3, Qe2 and Rad1, then black would use his time to trade off his bad piece (dark squared bishop) and get out of this bind with a timely d7-d6, Bg4 and Bxg4. Thus, White has to play aggressively and that's why, there's only one correct strategy in this position.

White's plans :
•Bxf7!!, Kxf7, Ng5++, Ke8 (or Kf8 or Kd7) with a quick win in sight.
•d4-d5 followed with e6 trying to bust open the center and leave Black's king naked.
•Ne1, Qe7, Qf3, d5, exd6 e.p. with a visible advantage. Plausible moves would be Bxf7 Or even Qxf7 followed by Nd5.
•a3, Bxc3, bxc3, Ne7, Ba3, O-O with a good advantage for a White but no win in sight.
•Ng5?! (Interesting move), d5, exd6 e.p. when Black is really just dead meat.

Obviously there are a whole other variety of plans in this position, I just wanted to show these guys that a strategy in chess isn't a combination of moves or text, It's a thought process which comes from Concrete reasoning, pre-existing knowledge and imbalance analysis. Keep in mind that here I've also shown their idea of ‘winning lines’. What they really meant to say here is ‘winning plans’ but instead said winning lines. I don't know if you still need a proof but if you do, consult *Silman's Complete Book of Chess Strategy* for satiating your thirst for proofs.

In their document, when they say that one mistake makes all the difference, it's really them not understanding the point. This is explained later.

While many people use the words ‘Winning strategy’ and ‘Correct strategy’ interchangeably, this is wrong.

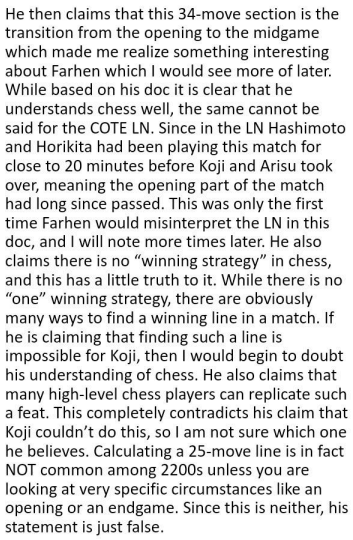
‘He then moves on to claim that Koji having predicted what moves Arisu would make was wrong because he was using his full skill to stop her from gaining any ground’ and elaborates. Another example of incomplete knowledge of COTE's saviors. It was stated in the LN itself and is directly taken from it, when Koji said ‘If I even made a single mistake, she would probably rush me all at once’. This is why these guys had to read the entire document before saying this. The points 2) and 3) are correlated and interlinked. I divided these points into different regions because I wanted to stress on the validity and authenticity of these two points

individually. If you read 2) and then read 3), everything makes complete sense but then again these guys didn't, and seemingly have insulted me for this as they said as follows:

‘For someone who claims to understand high-level chess, he doesn't seem to understand that even one wrong move or flawed move is all it would take for a high level player to claim an advantage’ and proceeds to elaborate with an example.
How is this related to what I said? I said Koji was using his abilities to the full extent to prevent Arisu from gaining any ground since Arisu would most definitely falter under time pressure which is completely true. It is a regular psychological trick that GMs use in play. They stop their opponent from gaining the higher ground and in the process, the opponent uses his time resources which causes him to panic since he gets low on time. This is the best representation and interpretation of what Kiyotaka has stated in the LN. How are any of the things that they said related to what I said? This is like saying that just because you are skinny and ugly, you're also not wealthy and smart. They have no idea what they are talking about. There's also the fact that the person they've included in their example is Magnus Carlsen, who is widely regarded as the greatest chess player of all time. Not just some regular GM. A regular GM would also not be able to take advantage of only one move. This person is the greatest chess player to have ever lived. Obviously he knows how to take advantage of even one mistake. Regular GMs for a matter of fact can't take advantage of one wrong move. There are exceptions though.

They've ‘rebunked’ their point by stating something completely opposite and irrelevant to what I've said, and proceeded to solidify their claims of ‘one mistake making all the difference in GM play’ by including a game of the greatest of all time. Not regular GMs with regular GM play. What they included was World Champion playing against a regular GM with regular elite super GM level play. They've committed Ad Hominem, False Dilemma, Dismissal and Tautological fallacies here. Their lack of knowledge is on display here. My point still remains except that one mistake.

-


He then claims that this 34-move section is the transition from the opening to the midgame which made me realize something interesting about Farhen which I would see more of later. While based on his doc it is clear that he understands chess well, the same cannot be said for the COTE LN. Since in the LN Hashimoto and Horikita had been playing this match for close to 20 minutes before Koji and Arisu took over, meaning the opening part of the match had long since passed. This was only the first time Farhen would misinterpret the LN in this doc, and I will note more times later. He also claims there is no “winning strategy” in chess, and this has a little truth to it. While there is no “one” winning strategy, there are obviously many ways to find a winning line in a match. If he is claiming that finding such a line is impossible for Koji, then I would begin to doubt his understanding of chess. He also claims that many high-level chess players can replicate such a feat. This completely contradicts his claim that Koji couldn’t do this, so I am not sure which one he believes. Calculating a 25-move line is in fact NOT common among 2200s unless you are looking at very specific circumstances like an opening or an endgame. Since this is neither, his statement is just false.

This part is continued from the previous part.

‘’While there is no “one” winning strategy, there are obviously many ways to find a winning line in a match’
See, they have admitted to my point here, while they were disagreeing on it in the previous part, when they stated that ‘This has little truth to it’. They also seem to mistake ‘plans’ with ‘lines’ and ‘strategy’.

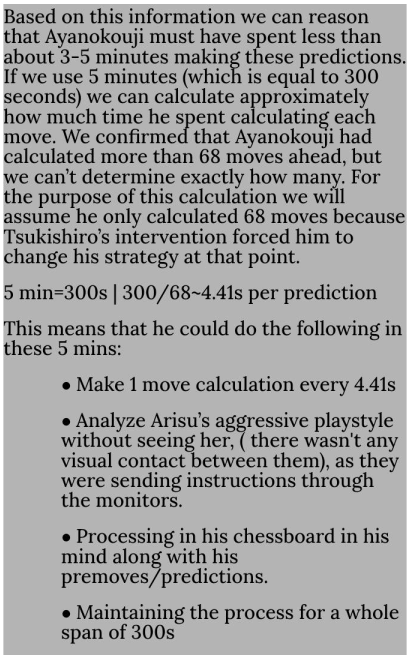
‘If he is claiming that finding such a line is impossible for Koji, then I would begin to doubt his understanding of chess.’
What a pathetic argument. In my document, I never, not even in the slightest, claimed that finding such a line is possible or impossible for Koji. What I said was that whatever these guys stated in their respective part is not stated in the LN, I never said finding such a line is impossible for Koji. These guys are literally accusing me of something I haven't done. They also have the wrong idea that ‘predicting moves’ is the same as ‘calculating a line’. I've already explained this in my original response’s 3) point but also explained it later in this document, these guys are just confused at this point. Also, what do they mean when they say that ‘I'd begin to doubt his understanding of chess', Is this your argument? At least put an argument instead of doubting someone's abilities.

‘He also claims that many high-level chess players can replicate such a feat. This completely contradicts his claim that Koji couldn't do this’
Another bad argument, and I'll explain why. Koji being a high-level chess player isn't even stated in the LN. All there is for Koji are V0 WR statements that he beat masters at young ages, not even one game of his is stated in the narrative. These are just statements, not validation of his playing strength. By statements, anybody can be buffed to the point that they are a chess elite and that they've beaten chess masters. Does this validate their playing strength, No. This is the exact reason why in this document, we have to proceed with discarding Koji's WR statements and treating him on the basis of ‘Proven Ability Scaling’.
These guys’ argument is that since Koji has WR statements, this would be wrong for Koji, I contradict myself and I don't know what to believe. They have used Koji's WR statements to prove me wrong in the narrative’s logic, which doesn't make any sense, since we're comparing a real-life game, not something the author came up out of thin air. I've also explained later why statements don't have to be taken into consideration. We are analyzing this ‘Chess Feat’, not ‘Chess Statements’.

‘Calculating a 25 move line is in fact not common among 2200s unless you're looking at very specific circumstances like an opening or an endgame. Since this is neither, this statement is false’
Horrible argument, First of all they've again thought of ‘predicting moves‘ as the same as ‘calculating a line’. They've also manipulated what I've said in my document. ‘Calculating a 25 move line is reasonable for Class B USCF Grade chess players’ is what I've said. What they have said is a simplistic version of what I said in my document.
What they've said would be right if we were living in the 1960s Or 1970s, not today. These guys probably have the premonition that only chess engines increased in rating and strength. Humans have done the same. A 1800-1900 rated player today would be around 2300 or 2200 in the 1960s or 1970s. Resources have increased and are available to everyone today, the number of chess prodigies is more than ever today, with better training and better engines;

playing strengths of individuals are rising rapidly, and similarly calculating capacities have also risen. The statement these guys have made would be valid if we were living in the 1960s Or 1970s. Not today. Today, an average CM (Candidate Master) is certainly capable of replicating this ‘feat’ if allowed to focus.

In this part of the document, they've again committed numerous fallacies like Quick Generalization, Dismissal, Ignoring the Question, Ducking, Ad Hominem, Begging the Question and Tautological fallacies. My point still remains as they haven't even tried to debunk my arguments.



Based on this information we can reason that Ayanokouji must have spent less than about 3-5 minutes making these predictions. If we use 5 minutes (which is equal to 300 seconds) we can calculate approximately how much time he spent calculating each move. We confirmed that Ayanokouji had calculated more than 68 moves ahead, but we can’t determine exactly how many. For the purpose of this calculation we will assume he only calculated 68 moves because Tsukishiro’s intervention forced him to change his strategy at that point.

5 min=300s | 300/68~4.41s per prediction

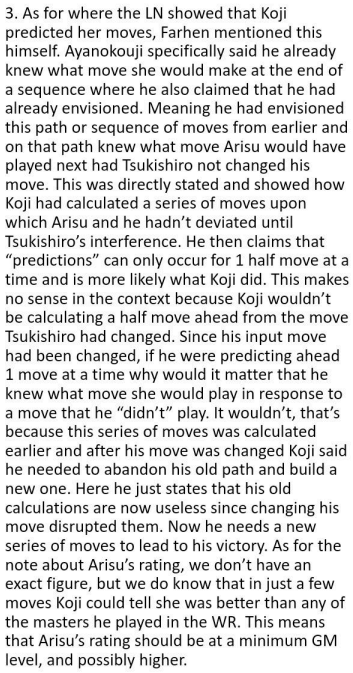
This means that he could do the following in these 5 mins:

- Make 1 move calculation every 4.41s
- Analyze Arisu’s aggressive playstyle without seeing her, (there wasn't any visual contact between them), as they were sending instructions through the monitors.
- Processing in his chessboard in his mind along with his premoves/predictions.
- Maintaining the process for a whole span of 300s

3) In this part of the document, the author says "We confirmed that Ayanokoji calculated 68 (half moves) moves ahead" When did we confirm? And when and where has it been stated in the light novel? Earlier, the author said that "he predicted all 34 of the moves in the game '' But when did he say that he had already calculated that ahead. Never. It was never stated in the light novel. The author made a wrong assumption confusing 'predicting moves' with 'calculating ahead'. Another serious error which occured on part of the author. There is a difference between predictions and calculating ahead. You predict outcomes that can happen but you calculate ahead all of the outcomes that can happen, can't happen, will happen and won't happen.
"We will assume that he only calculated 68 moves (at the risk of repeating myself, he means half moves) because Tsukishiro's intervention forced him to change his strategy" which is a biased assumption based not on facts (well there aren't any things he could base this of) but for the purpose of calculation. What is there to calculate since Kiyotaka hasn't analyzed and calculated ahead of those 68 half moves. He predicted them, he never saw ahead of them. Predictions could be done on each half move but seeing ahead is done for only one half move and continues in the future for a series of moves. This is also another invalid statement made by the author. Rest of the things stated are flawed since the things on which they are based are flawed except for the fact that Arisu has an aggressive playing style (which also was never

stated in the light novel, it isn't even deduced because there isn't any information about Arisu's rating as well as playing style in the light novel) which is made up.

-


3. As for where the LN showed that Koji predicted her moves, Farhen mentioned this himself. Ayanokouji specifically said he already knew what move she would make at the end of a sequence where he also claimed that he had already envisioned. Meaning he had envisioned this path or sequence of moves from earlier and on that path knew what move Arisu would have played next had Tsukishiro not changed his move. This was directly stated and showed how Koji had calculated a series of moves upon which Arisu and he hadn't deviated until Tsukishiro's interference. He then claims that "predictions" can only occur for 1 half move at a time and is more likely what Koji did. This makes no sense in the context because Koji wouldn't be calculating a half move ahead from the move Tsukishiro had changed. Since his input move had been changed, if he were predicting ahead 1 move at a time why would it matter that he knew what move she would play in response to a move that he "didn't" play. It wouldn't, that's because this series of moves was calculated earlier and after his move was changed Koji said he needed to abandon his old path and build a new one. Here he just states that his old calculations are now useless since changing his move disrupted them. Now he needs a new series of moves to lead to his victory. As for the note about Arisu's rating, we don't have an exact figure, but we do know that in just a few moves Koji could tell she was better than any of the masters he played in the WR. This means that Arisu's rating should be at a minimum GM level, and possibly higher.

3] In this part of the document, they have responded to how their claims are valid with respect to my claim and why this is 'rebunked'.

'As for where the LN showed that Koji had predicted her moves, Farhen mentioned this himself. ' and elaborates...
A terrible answer. I've said 'Earlier, the author said that "he predicted all 34 of the moves in the game '' But when did he say that he had already calculated that ahead. Never.'
What I meant in this context is that earlier the author assumed that Koji predicted all 34 of her moves but now he's saying that he has already calculated that far ahead. I never agreed with this because you guys mistaked 'predicting moves' with 'calculating ahead' which was also never stated in LN.

'This was directly stated and showed how Koji had calculated a series of moves upon which Arisu and he hadn't deviated until Tsukishiro's interference'
This statement and what these guys mean to say is never stated in the LN.

'Ayanokouji specifically said he already knew what move she would make at the end of a sequence where he also claimed that he had already envisioned'
A completely wrong interpretation of what is stated in the LN. Many people also misunderstood this. In the LN, Kiyotaka states that 'Under normal circumstances, I already knew what move she would make next'. What can be understood from this statement is as follows:
She made her move, he made his move and now he knows what move she would play next.
Not what they are saying. What they are saying is as follows:

She made her move, he made his move and now he knows all the moves she would play for her next 34 turns or as they say apparently the whole game until intervention.
If the latter was correct and true then Kiyotaka would've said ‘Under normal circumstances, I already knew all of the moves she would play next’, not ‘Under normal circumstances, I already knew what move she would make next’.
The key point is the usage of the word ‘next’ and not the usage of the phrase ‘all of the moves she would make next’ or the phrase ‘all moves’.
So, my point is completely correct.

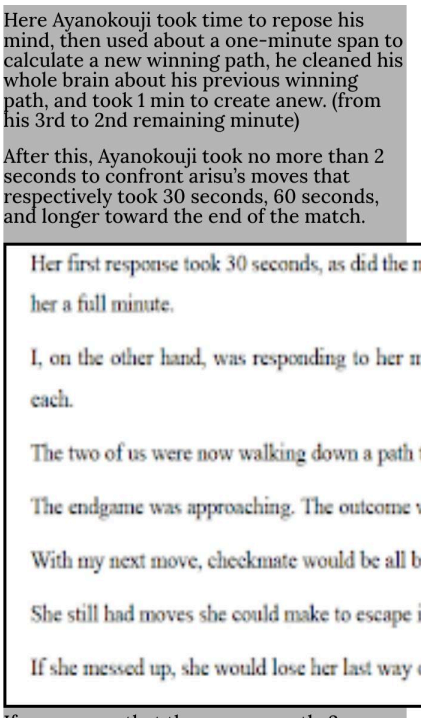
Since you guys have an affinity to use discord bots and wrong translations to prove your point, I'll include other sources in which the same thing has been said :
https://online.fliphtml5.com/xgemm/hgkm/#p=422 (page - 422)
https://online.anyflip.com/sbxxv/tmoq/mobile/ (page - 266)
(In this case, Koji says ‘Normally, I would have been able to intuit what move she was going to make.’ Keep in mind that here he doesn't even say ‘next’, let alone ‘all’ or anything related to that.)
Another example is literally in your own original CF document, where Koji says ‘Under more normal circumstances, I already knew what move she would make next’.

‘He then claims that “predictions” can only occur for one half-move and is more likely what Koji did. This makes no sense in the context because Koji wouldn't be calculating one half-move ahead from the move Tsukishiro had changed’ and elaborates...
My point about the difference between ‘predicting moves’ and ‘calculating ahead’ remains because of how I've shown and proven it above. Besides what is this ‘This makes no sense in the context because Koji wouldn't be calculating one half-move ahead from the move Tsukishiro had changed.’
We are talking about the timeline before Tsukishiro had intervened, not after Tsukishiro intervened. The author is confused about what the past is and what the future is. This whole logic is flawed because of my above mentioned difference between ‘predicting moves’ and ‘calculating ahead’, the fact that the author is trying to link completely different things together to rebunk his point and also because of his flawed perception of the timeline and not knowing what past is and what future is.
Tsukishiro hadn't intervened yet at this part of the timeline. Besides, even if he did, it makes zero sense for them to prove their point by saying ‘it makes no sense’ as it is not stated in the LN.

‘As for the note about Arisu's rating, we don't have an exact figure but we do know that in just a few moves Koji was able to tell that she was better than any of the masters he played in the WR.’
This literally doesn't correlate to what I've said. What I've said is that ‘...except for the fact that Arisu has an aggressive playing style (which also was never stated in the light novel, it isn't even deduced because there isn't any information about Arisu's rating as well as playing style in the light novel) which is made up.’ Her being considerably better than the masters Koji played in the WR is another statement, and as I've already stated because of Proven Ability, and for evaluation purposes, we have to discard these statements. Also, someone being aggressive doesn't correlate to their playing strength. Anybody can be aggressive but only a

few become masters. Being aggressive doesn't mean anything since you have to do it correctly, otherwise it simply is wrong. We are also scaling ‘Chess Feats', not ‘Chess Assumptions’ Or ‘Chess statements’. There's no validation of her playing strength in the LN. Besides, Hashimoto makes the only statement about her playing style as when he says ‘Whoa.. Hey! What kinda otherworldly play-style are you using?!’ which is just him implying that he's a total beginner. He simply doesn't understand what Arisu and Koji are doing and that's all there is to it.

This part of the document is again not rebunked because of these guys flawed logic, misinterpretations, commitment of fallacies such as Bandwagon and acts of smearing and also lack of knowledge. My point remains.


Here Ayanokouji took time to repose his mind, then used about a one-minute span to calculate a new winning path, he cleaned his whole brain about his previous winning path, and took 1 min to create anew. (from his 3rd to 2nd remaining minute)

After this, Ayanokouji took no more than 2 seconds to confront arisu's moves that respectively took 30 seconds, 60 seconds, and longer toward the end of the match.

Her first response took 30 seconds, as did the n

her a full minute.

I, on the other hand, was responding to her n

each.

The two of us were now walking down a path

The endgame was approaching. The outcome

With my next move, checkmate would be all b

She still had moves she could make to escape

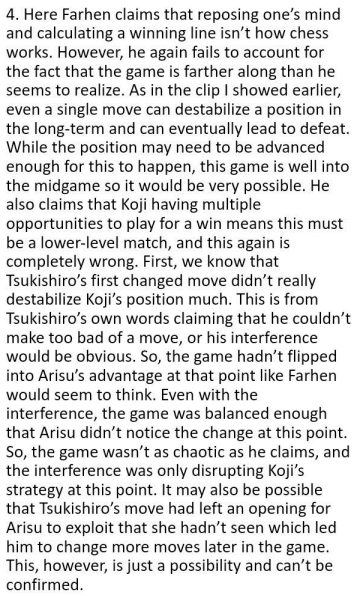
If she messed up, she would lose her last way

{Between the last page and this page, the included content was relevant and didn't contain anything which was invalid, erroneous or misunderstood}

4) Here, The author stated that "Ayanokouji took time to repose his mind, then used about a one-minute span to calculate a new winning path"

That's not how chess works, In chess ; at a specific point in the game there is a key position (actual term in chess Terminology) in which correct decisions win the game and wrong decisions lose the game (considering you aren't winning or losing beforehand and the game is balanced until that point ; which is true in case of Kiyotaka) Opportunity doesn't strike twice, you either take the gamble and win or lose depending on your ability or not take the gamble and allow yourself to defend or settle for a draw. If you lose your chance to play a certain move, you won't be allowed to do so again by a strong opponent. This is not how chess (or real life for that matter works).

-


4. Here Farhen claims that reposing one's mind and calculating a winning line isn't how chess works. However, he again fails to account for the fact that the game is farther along than he seems to realize. As in the clip I showed earlier, even a single move can destabilize a position in the long-term and can eventually lead to defeat. While the position may need to be advanced enough for this to happen, this game is well into the midgame so it would be very possible. He also claims that Koji having multiple opportunities to play for a win means this must be a lower-level match, and this again is completely wrong. First, we know that Tsukishiro's first changed move didn't really destabilize Koji's position much. This is from Tsukishiro's own words claiming that he couldn't make too bad of a move, or his interference would be obvious. So, the game hadn't flipped into Arisu's advantage at that point like Farhen would seem to think. Even with the interference, the game was balanced enough that Arisu didn't notice the change at this point. So, the game wasn't as chaotic as he claims, and the interference was only disrupting Koji's strategy at this point. It may also be possible that Tsukishiro's move had left an opening for Arisu to exploit that she hadn't seen which led him to change more moves later in the game. This, however, is just a possibility and can't be confirmed.

4] In this part of the document, they have again seemingly rebunked their arguments against my claims.

'Here Farhen claims that reposing one's mind and calculating a winning line isn't how chess works. However, he again fails to account for the fact that the game is farther along than he seems to realize. As in the clip I showed earlier, even a single move can destabilize a position in the long term and lead to defeat. ' and elaborates...
Pathetic argument. First of all, they have manipulated what I've said, What I've said is 'That's not how chess works, In chess ; at a specific point in the game there is a key position (actual term in chess Terminology) in which correct decisions win the game and wrong decisions lose the game (considering you aren't winning or losing beforehand and the game is balanced until that point ; which is true in case of Kiyotaka) Opportunity doesn't strike twice, you either take the gamble and win or lose depending on your ability or not take the gamble and allow yourself to defend or settle for a draw.', not 'reposing one's mind and calculating a winning line isn't how chess works.' There's a gigantic difference between the two.
How does the game being farther along even change anything? What I've said is simply more or less the same as what they've said. They also said that even one move can destabilize a position in the long term and lead to defeat. They are just supporting my argument, not challenging it and stating why it is wrong.

'The game being farther than I realize'? This argument is created out of thin air. I'll make an analogy to show what I mean:
This is like saying just because a war has lasted for long, it means someone is definitely losing and someone is winning.
The game being farther than what I realize or what it really is doesn't change anything. Chronology has no relation to the result of a chess game. One can win the game in the opening, middlegame and/or endgame. Same goes for advantage, blunders and mistakes. One can win or lose at any point in a game.
You get it, don't you?

This whole statement is just an attempt to maneuver out your lies with saying something completely irrelevant to the context. And theres also the fact that you supported my argument instead of challenging it, so yeah.

‘He also claims that Koji having multiple opportunities to play for a win must mean that this is a lower rated match, and this again completely wrong’
A blatant lie and nonsensical argument. They've again presented my statement in a too simplistic manner. What I've said is ‘This statement is partially invalid due to Ayanokoji randomly having more than two opportunities to play for wins, even after the key position. (It can either mean that both aren't evenly matched which proves to be wrong in the future or that both guys aren't very good at a high master level which could be true)’. I've stated that this statement is partially invalid and also elaborated why. I've not just said ‘Koji having multiple opportunities to play for a win must mean that this is a lower rated match,’. There's again a big difference between the two statements. Also, as both player's ratings aren't stated and everything we have about their playing strength is just Statements, this argument is completely wrong. I've already elaborated on why statements have to be discarded without relevant feats.

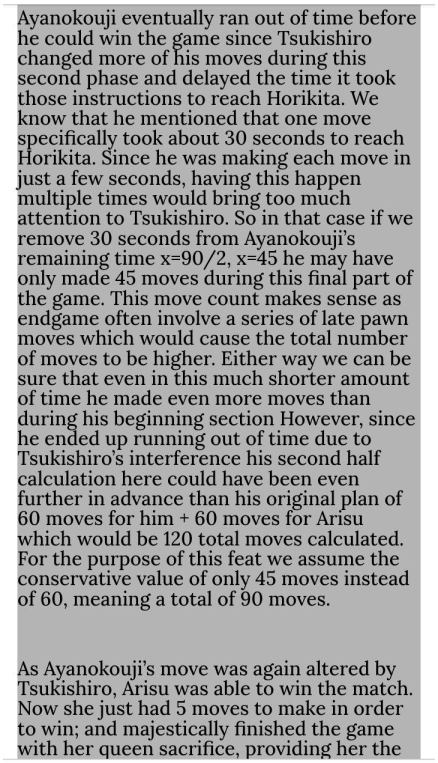
‘First, we know that Tsukishiro's first changed move didn't destabilize Koji's position much. This is from Tsukishiro's own words claiming that he couldn't make too bad of a move, or his interference would be obvious’ and elaborates.
Another pathetic argument, there are some inherent flaws here as well.
Firstly, Tsukishiro said in LN, “We were still forced into making an extremely difficult decision”. This is an abstract statement with no complementary details about the move. The move could be extremely complex but be a good one. The move could also be extremely complex but be a really bad one. Again this doesn't tell us the evaluation of the game and the stability of Koji's Or Arisu's position, it only tells us that the changed move was complex, nothing else. Thus, the author’s point is flawed. Secondly, As I've already said in my original document, you don't have the luxury to play similarly good moves which keep the evaluation even, this is highly convenient and not how the game works. Since we also don't know anything about the moves played, this entire argument is wrong and incorrect.

‘So, the game wasn't as chaotic as he claims, and the interference was only disrupting Koji's strategy at this point. It may also be possible that Tsukishiro’s move had left an opening that she hadn't seen, which led to him changing even more moves later in the game. This however is just a possibility and can't be confirmed’

Nowhere in the LN has it been stated whether the whole game was chaotic or balanced, whether it was wild or even. It is stated by Koji at one point that the game was even when he was playing against Arisu but this doesn't tell us the bigger picture. This doesn't show us whether the whole game was even, wild, balanced, chaotic or a roller-coaster. This is just another assumption on these guys' part. Considering my above argument, this becomes even more of a flaw.

In this part of the document, there has been manipulation and misinterpretation of my statements, conclusions made on massive assumptions and again ‘rebunking’ based on

imaginary and unstated statements and commitment of fallacies like Begging the question and False Dilemma. I mean they literally supported my argument. My point remains.

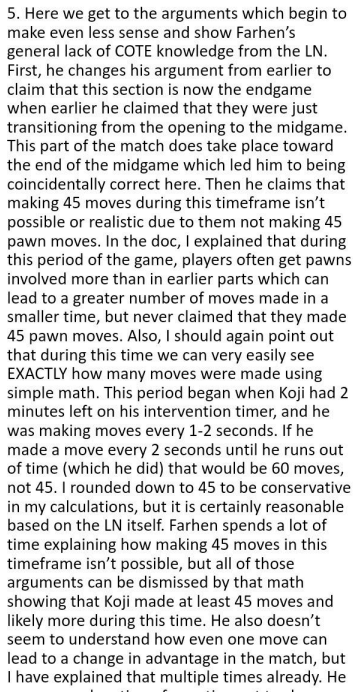

Ayanokouji eventually ran out of time before he could win the game since Tsukishiro changed more of his moves during this second phase and delayed the time it took those instructions to reach Horikita. We know that he mentioned that one move specifically took about 30 seconds to reach Horikita. Since he was making each move in just a few seconds, having this happen multiple times would bring too much attention to Tsukishiro. So in that case if we remove 30 seconds from Ayanokouji's remaining time x=90/2, x=45 he may have only made 45 moves during this final part of the game. This move count makes sense as endgame often involve a series of late pawn moves which would cause the total number of moves to be higher. Either way we can be sure that even in this much shorter amount of time he made even more moves than during his beginning section However, since he ended up running out of time due to Tsukishiro's interference his second half calculation here could have been even further in advance than his original plan of 60 moves for him + 60 moves for Arisu which would be 120 total moves calculated. For the purpose of this feat we assume the conservative value of only 45 moves instead of 60, meaning a total of 90 moves.

As Ayanokouji's move was again altered by Tsukishiro, Arisu was able to win the match. Now she just had 5 moves to make in order to win; and majestically finished the game with her queen sacrifice, providing her the

5) In this part of the document, it is stated that Ayanokouji was winning but Instead Arisu won due to Tsukishiro's Interference, here ; there is something interesting to note. " but wait ;
Later it is stated that Arisu won via Queen Sacrifice.
Why would Arisu and Kiyotaka make pawn moves when there are heavy pieces (Queens) around. Queens are very powerful in endgames. I understand the fact the endgames often have a series of late pawn moves but why would these guys make pawn moves when Queens are around. This would not only cause their position to be overextended but also compromise their king's safety. Four or five would be reasonable pawn moves but my God, something that amounts to 45 is just harmfully wrong. It is important to note that later it is revealed that Arisu won via Queen Sacrifice which means that both guys had their queens on board. Also, even if they were to shuffle their pieces they wouldn't do it for more than 10 moves. (Shuffling for 45 moves would in most cases cause the threefold repetition to occur and you don't have the luxury of repeating in every position).
This should also be kept in mind that it is stated in the light novel, that Ayanokoji was winning (stated in "with my next move, checkmate would be all but certain") But Tsukishiro intervened and Arisu won via Queen Sacrifice.
If Ayanokoji was winning via checkmate, then it must mean he had Arisu's king in a mating net. But Tsukishiro intervened ;
And instead Arisu won Via Queen Sacrifice five moves later.
If Arisu's king is in a mating net, how could intervention by Tsukishiro simply change that? It is not possible, If Ayanokoji had Arisu's King in a mating net, then it means he had broke into her defenses, so the advantage (both static and dynamic) would be towards Ayanokoji's side.

But as we know, it is stated that after Tsukishiro's intervention, only five moves later Arisu won which is highly improbable. Keep in mind that in this scenario a series of moves would have to be made by Kiyotaka to get his advantage squandered. But Tsukishiro did that with only one move and we also know that this is not the key position (if Tsukishiro did so in the key position, everything would have remained valid) but Kiyotaka is already on the course of victory, which means he has already done the right thing in the key position.
What is interesting though is that if everything remains valid, and a position like this occured, we get an estimation of the average Elo of both players. Chaotic Positions with such heavy imbalances, weaknesses and compromised king safety like this do occur but in Lower rated games (that is, Average Elo < 2100)
So this part of the document provides us with an estimation of the Average rating of both players, assuming everything to be valid and if we consider everything to be invalid (more likely since these 'late pawn moves in endgame while heavy pieces being around' and 'one move by Tsukishiro's intervention causing the whole result to change' don't make any sense whatsoever) causes it to become a fallacy and be rendered as invalid. I don't know whether to consider this an invalid fallacy or valid since the author has made these assumptions, but since there are major contradictions, I will consider this to be invalid as well.
Also, in the light novel Kiyotaka stated that "Over the course of next to three moves, it felt as though the match had deviated from my path"
What exactly are we supposed to do about this one, this is a major contradiction in the light novel itself, let alone the document. What does he mean when he says that "it felt as though the match had deviated from my path"? It's as if a buffoon made this statement (I'm sorry for using inappropriate language but I wanted the readers to understand the gravity of this statement and how idiotic it seems). It is almost as if a beginner is making this statement. If something isn't going according to your plan, it means you either miscalculated or blundered (which is not the case, since his calculations are perfect and Tsukishiro is responsible for this) or the position has been changed. Since the first one is wrong, the second has to be true. In this case, you're supposed to look at the move-list and report it to the arbiter (referee). Why didn't he do this?

-


5. Here we get to the arguments which begin to make even less sense and show Farhen's general lack of COTE knowledge from the LN. First, he changes his argument from earlier to claim that this section is now the endgame when earlier he claimed that they were just transitioning from the opening to the midgame. This part of the match does take place toward the end of the midgame which led him to being coincidentally correct here. Then he claims that making 45 moves during this timeframe isn't possible or realistic due to them not making 45 pawn moves. In the doc, I explained that during this period of the game, players often get pawns involved more than in earlier parts which can lead to a greater number of moves made in a smaller time, but never claimed that they made 45 pawn moves. Also, I should again point out that during this time we can very easily see EXACTLY how many moves were made using simple math. This period began when Koji had 2 minutes left on his intervention timer, and he was making moves every 1-2 seconds. If he made a move every 2 seconds until he runs out of time (which he did) that would be 60 moves, not 45. I rounded down to 45 to be conservative in my calculations, but it is certainly reasonable based on the LN itself. Farhen spends a lot of time explaining how making 45 moves in this timeframe isn't possible, but all of those arguments can be dismissed by that math showing that Koji made at least 45 moves and likely more during this time. He also doesn't seem to understand how even one move can lead to a change in advantage in the match, but I have explained that multiple times already. He

5] In this part of the document, they claim this is the most flawed one on my part and that my lack of knowledge has led to it.

'First, he changes his argument from earlier to claim that this section is now the endgame when earlier he claimed that they were just transitioning from the opening to the midgame' Again, I've already agreed to my mistake in claiming that they were just transitioning from the opening to the midgame. This is already evident and I won't disagree that this happened due to my mistake. But a major error has been ignored by these guys here. What they stated in the original CF document was that 'This move cause does make sense because endgames often involve a series of late pawn moves which causes the total number of moves to be higher'. This is him indirectly stating that the game is in endgame. See, I didn't reach this conclusion, the author has reached this conclusion (seemingly out of nowhere) and that's why I tried to prove why this was wrong. I didn't claim this is the endgame now, the author did. It is clearly evident that the game has progressed a lot, because 45 moves (90 half-moves) is a big number but it is not evident and stated that the game is in the endgame phase. I didn't reach this conclusion, the author did and he blamed me for it.
The endgame phase was stated by Koji as 'The endgame was approaching', but it was never said whether this is exactly the endgame now. The exact point of transition between a middlegame and endgame is very vague and can only be specified by the exchange or loss of heavy pieces (Queens and Rooks). It isn't exactly possible to tell this here. Another reason why if we knew what moves were made, this contradiction wouldn't arise.

Another thing to note is, what the author has stated in the original CF document is that "He may have only made 45 moves in this part of the game. This move count does make sense as endgames often involve a series of late pawn moves which would cause the total number of moves to be higher"

What he later states is that ‘I explained that during this period of the game, players often get pawns involved more than in earlier parts which can lead to a greater number of moves made in a smaller time, but never claimed that they made 45 pawn moves.’
Look carefully here, and compare these two statements :

- “This move count does make sense as endgames often involve a series of late pawn moves which would cause the total number of moves to be higher”
- “I explained that during this period of the game, players often get pawns involved more than in earlier parts which can lead to a greater number of moves made in a smaller time, but never claimed that they made 45 pawn moves.”

In the first statement, he clearly claims that endgames involve late pawn moves which causes the total number of moves to be higher but in the second statement, he says that he never claimed that they made a huge number of pawn moves. So he's essentially saying that I've said involvement of pawn moves causes the total number to be higher but I'm not saying that all moves are pawn moves. This would be relevant but he disregarded all the statements which I made in my document.
Look what I've stated in my document,

- ‘Four or five would be reasonable pawn moves but my God, something that amounts to 45 is just harmfully wrong.’
- ‘Why would Arisu and Kiyotaka make pawn moves when there are heavy pieces (Queens) around. Queens are very powerful in endgames. I understand the fact the endgames often have a series of late pawn moves but why would these guys make pawn moves when Queens are around. This would not only cause their position to be overextended but also compromise their king's safety’
- Also, even if they were to shuffle their pieces they wouldn't do it for more than around 10 moves. (Shuffling for 45 moves would in most cases cause the threefold repetition to occur and you don't have the luxury of repeating in every position).

All this literally contradicts what he has said, what he said is irrelevant considering that he disregarded these statements.
Even if we were to just discard the statement ‘This move count does make sense as endgames often involve a series of late pawn moves which would cause the total number of moves to be higher”, it still doesn't make sense because making pawn moves is only viable for action in pawn endgames, not queen endgames. Here's proof :

https://en.m.wikipedia.org/wiki/Queen_versus_pawn_endgame and also
https://www.chess.com/article/view/overextending-your-pawns .

This whole logic is completely wrong and flawed.

‘Also, I should again point out that during this time we can very easily see EXACTLY how many moves were made using simple math. This period began when Koji had around two minutes left on his intervention timer, and he was making moves every 1 - 2 seconds.’ and elaborates...

There are major flaws in this argument. I'll state everything that's wrong.

The most important argument of this whole thing that has nothing to do with MATH and stuff is because this argument is debunked by the narrative.
The LN goes as follows, Koji in the narrative tells us the following:
‘With less than one and a half minutes remaining on my own timer, I found myself facing the biggest hurdle yet.’
This is followed by Suzune getting emotional and her remarking that she doesn't want to lose. Right after Suzune gets emotional, Koji says ‘I closed my eyes. I had a few dozen seconds left'. Some translations simply say ‘I had a few seconds left’.

This tells us that from his time being 1 ½ minutes to it being some dozen seconds or few seconds, he didn't make a move or rather should I say Suzune didn't make a move as she was contemplating her life choices. This is taken directly from the LN.
Right after this, Arisu got a M5.
As you can clearly see, this is taken right after Koji said he only took 1-2 seconds to make his move. It's also at the point where he said he had around 2 minutes on his own timer.
Clearly none of this amounts to even 10 half moves let alone 60 or something, they have simply ignored what happened in the narrative.

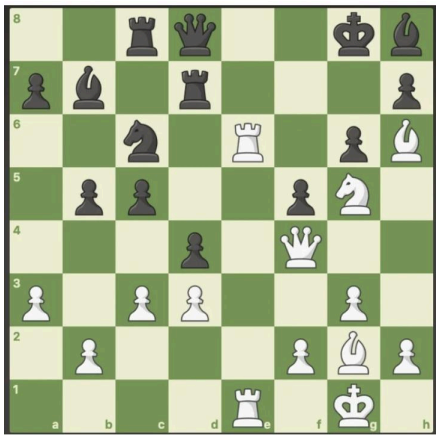
From the above mentioned arguments, it is completely evident that the author’s SIMPLE MATH is completely wrong.

‘Farhen spends a lot of time explaining why making 45 moves in this timeframe is wrong, but all of these arguments can be dismissed by showing that Koji made at least 45 moves or likely more during this time’

A complete lie. I've never spent any time on ‘explaining why making 45 moves in this timeframe is wrong’. What I've stated in my document is shown in the 5) of my original Debunk document. One can clearly see that these guys have lied without shame at this point. These arguments can also not be dismissed by the calculations because my arguments have nothing to do with the calculations and I've proven the calculations to be wrong and irrelevant.

‘He also doesn't seem to understand that how even one move can lead to a change in advantage in the match, but I've already explained that multiple times’
Funnily enough, here they are debunking their own arguments. In the previous part, they stated that ‘First, we know that Tsukishiro's first changed move didn't destabilize Koji's position much. This is from Tsukishiro's own words claiming that he couldn't make too bad of a move, or his interference would be obvious’. Besides, they gave an example as well.
I've also debunked this argument as well but it is funny that these guys literally just debunked their own counterargument. Anyways, I'll still stress what I've stated in my document. What I've stated is ‘This should also be kept in mind that it is stated in the light novel, that Ayanokoji was winning (stated in "with my next move, checkmate would be all but certain") But Tsukishiro intervened and Arisu won via Queen Sacrifice.
If Ayanokoji was winning via checkmate, then it must mean he had Arisu's king in a mating net. But Tsukishiro intervened ;

And instead Arisu won Via Queen Sacrifice five moves later. If Arisu's king is in a mating net, how could intervention by Tsukishiro simply change that? It is not possible, If Ayanokoji had Arisu's King in a mating net, then it means he had broke into her defenses, so the advantage (both static and dynamic) would be towards Ayanokoji's side. But as we know, it is stated that after Tsukishiro's intervention, only five moves later Arisu won which is highly improbable. Keep in mind that in this scenario a series of moves would have to be made by Kiyotaka to get his advantage squandered. But Tsukishiro did that with only one move and we also know that this is not the key position (if Tsukishiro did so in the key position, everything would have remained valid) but Kiyotaka is already on the course of victory, which means he has already done the right thing in the key position.' See these guys literally didn't even consider these statements. Maybe they did but it went over their head. One move is enough to get yourself a lost position in normal circumstances but not when you have your opponent's king in a mating net, the static as well as dynamic advantage is towards your side and you've broken into your opponent's defense. It essentially also means that your opponent has lower material than you. In this case, a series of mistakes or blunders would have to be done to get your advantage squandered. Not just one move, One changed move (at best) will turn the position only better for you with a clear advantage but not a forced win (like checkmate) and you will still be better than your opponent. But in the LN, one changed move by Tsukishiro causes Arisu to get a M5. This either means that the position is heavily imbalanced or that both players are much lower rated than master strength. All of this is already stated in my original debunk. And you can see that as well. Since this also went over these guys or simply the author's head, I'll give an example.



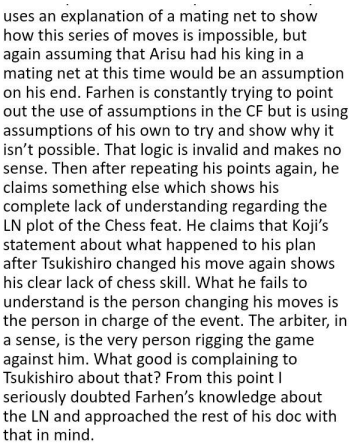
Here's the link :
https://www.reddit.com/r/chess/comments/qlrva2/chesscom_lists_qc7_in_this_position_meier_vs/?rdt=49205

This position is the literal encapsulation of
'Keep in mind that in this scenario a series of moves would have to be made by Kiyotaka to get his advantage squandered. (Don't get fooled by the title of this post. There are several moves that win here but Qc7 is just too majestic to be ignored as it leaves the queen *En Prise* to three pieces in their face). But Tsukishiro did that with only one move and we also know that this is not the key position (if Tsukishiro did so in the key position, everything would have remained valid) but Kiyotaka is already on the course of victory, which means he has already done the right thing in the key position.'

GothamChess himself has said that even if white were move his king back and forth, he'd still win; herein this video : https://youtu.be/O4odWEoY69I?si=H18aSC9ng80bHnFP. It is one of the top three ones. While this is certainly a sarcastic statement made for teaching purposes, he's saying that you can literally waste a lot of moves but still win.

This is another instance of lack of knowledge, disregarding your opponent's statements, arguments and going circular about your arguments.

-


uses an explanation of a mating net to show how this series of moves is impossible, but again assuming that Arisu had his king in a mating net at this time would be an assumption on his end. Farhen is constantly trying to point out the use of assumptions in the CF but is using assumptions of his own to try and show why it isn't possible. That logic is invalid and makes no sense. Then after repeating his points again, he claims something else which shows his complete lack of understanding regarding the LN plot of the Chess feat. He claims that Koji's statement about what happened to his plan after Tsukishiro changed his move again shows his clear lack of chess skill. What he fails to understand is the person changing his moves is the person in charge of the event. The arbiter, in a sense, is the very person rigging the game against him. What good is complaining to Tsukishiro about that? From this point I seriously doubted Farhen's knowledge about the LN and approached the rest of his doc with that in mind.

This part of the document is continued from the previous part.

'He uses an explanation of a mating net to show how this series of moves is impossible, but again assuming that Arisu had 'his' (not his, Arisu is a girl) king in a mating net at this time would be an assumption on his end. Farhen is constantly trying to point out the use of assumptions in the CF but using assumptions of his own to try and show why it isn't possible. ' and elaborates...

Desperate argument if I'm being honest. I've explained everything and what I've explained is right, It's literally all written in 5) of my original debunk + supported by the narrative and I've also elaborated in 5], so that they understand that they are completely wrong. Koji explains in the LN that 'With my next move, check-mate would be all but certain', this simply means he's got Arisu in a mating net. Yet I'll fucking provide an article to show what the thing 'mating net' means, it's not some perverted thing : https://www.quora.com/What-is-a-mating-net-position-in-chess

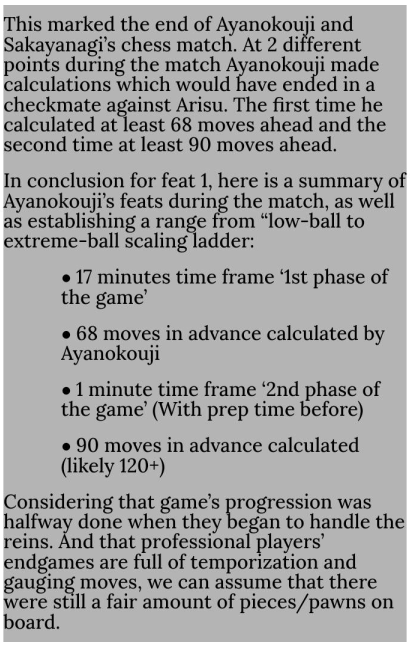
I have not assumed one single thing. Everything has been taken from their document. What the author has done is simply a classical case of Smearing, Ad Hominem and Tautological fallacy.

'Then after repeating his points again, he claims something else which shows his complete lack of understanding regarding the LN plot of the Chess feat. He claims that Koji's statement about what happened to his plan after Tsukishiro changed his move again shows his clear

lack of skill. What he fails to understand is that the person changing his moves is the person in charge of the event' and elaborates...

A dull and blunt argument. Everybody who reads the LN knows that Tsukishiro is changing his moves. So what is the point of him even playing then? You're going to lose one way or another and you're not going to win because this one person will keep changing your moves. In that case, what is even the point of playing then? This whole argument is horribly flawed. Also, even if Tsukishiro were to change his moves, he wouldn't make a statement like '"Over the course of next to three moves, it felt as though the match had deviated from my path". He would simply say 'The position has been changed', 'Somebody is interfering', 'This is not what I played' Or 'My move has been changed'. Not whatever nonsense he's said in the LN. My point here is not an assumption but simple common sense. The author tries to simply cover for it. (Keep in mind that Koji doesn't know from the start that Tsukishiro is working behind the scenes, but it becomes obvious when his first move is changed. This is stated by him in 'Now I had to wipe my slate clean.', which tells us that he did know about someone changing the moves. Even if it is directly not stated in the LN, it becomes common sense since your move was changed)

In this part of the document, there are literally all kinds of fallacies, lack of concrete knowledge, author's lack of knowledge, dismissal and ducking, no elaboration on author's part and many more. All of my points remain.



This marked the end of Ayanokouji and Sakayanagi's chess match. At 2 different points during the match Ayanokouji made calculations which would have ended in a checkmate against Arisu. The first time he calculated at least 68 moves ahead and the second time at least 90 moves ahead.

In conclusion for feat 1, here is a summary of Ayanokouji's feats during the match, as well as establishing a range from "low-ball to extreme-ball scaling ladder:

- 17 minutes time frame '1st phase of the game'
- 68 moves in advance calculated by Ayanokouji
- 1 minute time frame '2nd phase of the game' (With prep time before)
- 90 moves in advance calculated (likely 120+)

Considering that game's progression was halfway done when they began to handle the reins. And that professional players' endgames are full of temporization and gauging moves, we can assume that there were still a fair amount of pieces/pawns on board.

6) In this part of the document, the author states that "At 2 different points during the match, Ayanokoji made calculations which would have ended in checkmate against Arisu"
He only made calculations which would end in checkmate the second time, not the first time [as I already stated and proved in 2)]

Then, the author states that "The first time he calculated at least 68 moves (again, here he means half-moves) ahead and the second time he calculated at least 90 moves (half- moves) ahead. "
Both these are wrong and incorrect as I proved in 3) and 5) respectively. The first statement is completely an error and the second one is invalid.
"In conclusion for feat 1, here is a summary of Ayanokouji's feats during the match, as well as establishing a range from low-ball to extreme-ball scaling ladder"
This is followed by the errors as I stated, except the first and third point.
"Considering that the game's progression was halfway done when they began to handle the reins. And that profession players' endgames are full of temporization and gauging moves, we can assume that there were still a fair amount of pieces and pawns on the board"
Sorry but professional players' (real masters and experts) endgames are not filled with temporization Or losing tempi (singular : tempo plural : tempi , another chess term, go look it up) as losing vital tempi can cause severe weaknesses and why would somebody lose tempi in an endgame (triangulation is whole another matter, triangulation : another chess term) when they can improve their position. This is another invalid statement stated by the author.
"We can assume that there were still a fair amount of pieces and pawns on the board"
We can only assume that there were heavy and major imbalances in both players' positions like compromised king safety of both players, dynamic pawn structure, static weaknesses on both sides etc. [disregarding the contradictions stated in 5)]

-

6. Here is another repeat of earlier points. I showed that Koji had calculated a series of moves in which he was accurately predicting Arisu's responses. Assuming his calculations ended at the very move that was changed is just ridiculous and wrong. He also again confuses the timeline of events with his arguments. He claims that the moment Koji and Arisu took over was an endgame and as such few pieces are remaining, when instead this was much closer to midgame and not even the halfway point of the match as shown in scans.

6] This part of the document is addressed to my document on the 6) point.

‘Here is another repeat of earlier points. I showed that Koji had calculated a series of moves in which he was accurately predicting Arisu's responses. Assuming his calculations ended at the very move that was changed is just ridiculous and wrong’

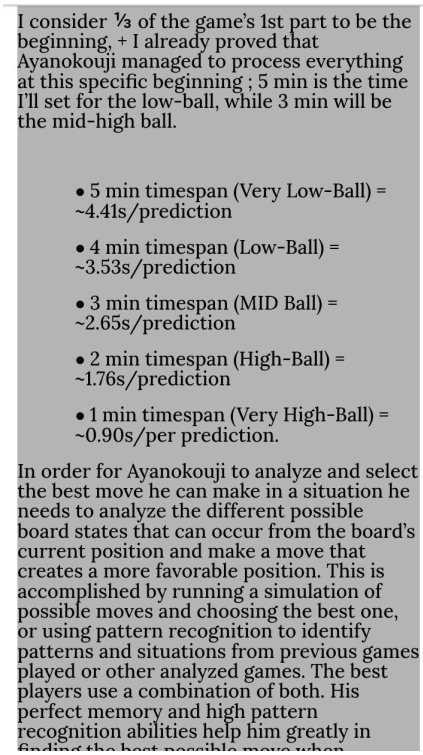
As I've already proven in my 5] point, everything I've stated and elaborated upon in my original document's 5) point is completely right and valid. Besides when did I claim ‘Assuming his calculations ended at the very move that was changed is just ridiculous and wrong’. What I've said in my part of the document is ‘He only made calculations which would end in checkmate the second time, not the first time [as I already stated and proved in 2)]’. They have again tried to blame me for something I haven't even done. Also this argument ‘Assuming his calculations ended at the very move that was changed is just ridiculous and wrong’ is complete horseshit because dudes forgot how timeline works.

‘He also again confuses the timeline of events with his arguments. He claims that the moment Ayanokoji and Arisu took over is an endgame and as such few pieces are remaining,

when instead this was much closer to mid game and not even the halfway point of the match as shown by scans'

Hilariously bad argument and perception. My part of the original document is just above. One can clearly see the following from the original CF document :
"Considering that the game's progression was halfway done when they began to handle the reins. And that profession players' endgames are full of temporization and gauging moves, we can assume that there were still a fair amount of pieces and pawns on the board"
The author is literally saying what he has said in his document is wrong and has blamed me for it. Like my God, they have literally contradicted their own statements in the original CF document and blamed the contradiction on me. And no, this is exactly related to the same point. There's no change of chronology or statements here. This is like robbing a store in broad daylight and then putting the blame on a damn sleeping bird on a window.

This part of the rebunk document is completely flawed because of my proofs in 5), 5] and 6). It is also pretty brain dead because of that hilarious statement.



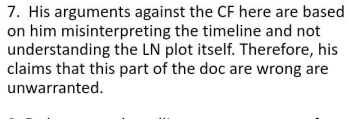
I consider ⅓ of the game's 1st part to be the beginning, + I already proved that Ayanokouji managed to process everything at this specific beginning ; 5 min is the time I'll set for the low-ball, while 3 min will be the mid-high ball.

- 5 min timespan (Very Low-Ball) = ~4.41s/prediction
- 4 min timespan (Low-Ball) = ~3.53s/prediction
- 3 min timespan (MID Ball) = ~2.65s/prediction
- 2 min timespan (High-Ball) = ~1.76s/prediction
- 1 min timespan (Very High-Ball) = ~0.90s/per prediction.

In order for Ayanokouji to analyze and select the best move he can make in a situation he needs to analyze the different possible board states that can occur from the board's current position and make a move that creates a more favorable position. This is accomplished by running a simulation of possible moves and choosing the best one, or using pattern recognition to identify patterns and situations from previous games played or other analyzed games. The best players use a combination of both. His perfect memory and high pattern recognition abilities help him greatly in finding the best possible move when

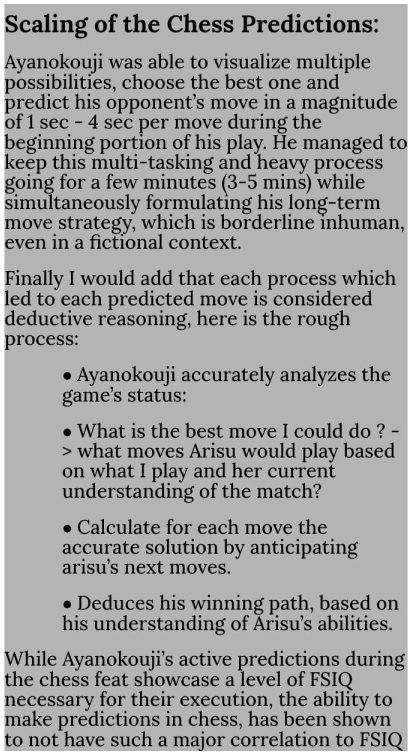
7) Anything and everything which has been stated by the author in the first paragraph including the high-ball list part of the document is wrong (including the math, since he did the math on wrong basis) as it is based on fallacies; which have been proven earlier.
In the second paragraph, the author shows us a glimpse of real life and true facts which are completely right and true. There is nothing wrong with what follows this paragraph until the next part.

-



7] This part of the document is about my apparent misinterpretations and understanding of the LN plot.

As already proven in 5), 5] ,6) and 6], all of my claims are correct, valid and true. Thus this part of the 'rebunk' document is not rebunked. My point remains.



Scaling of the Chess Predictions:

Ayanokouji was able to visualize multiple possibilities, choose the best one and predict his opponent's move in a magnitude of 1 sec - 4 sec per move during the beginning portion of his play. He managed to keep this multi-tasking and heavy process going for a few minutes (3-5 mins) while simultaneously formulating his long-term move strategy, which is borderline inhuman, even in a fictional context.

Finally I would add that each process which led to each predicted move is considered deductive reasoning, here is the rough process:

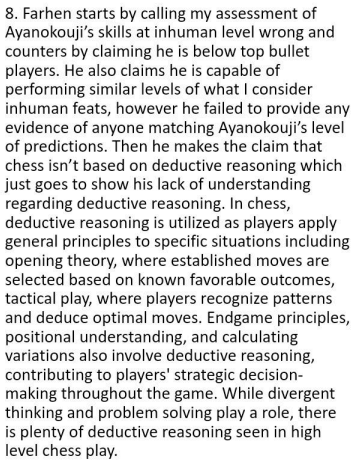
- Ayanokouji accurately analyzes the game's status:
- What is the best move I could do ? -> what moves Arisu would play based on what I play and her current understanding of the match?
- Calculate for each move the accurate solution by anticipating arisu's next moves.
- Deduces his winning path, based on his understanding of Arisu's abilities.

While Ayanokouji's active predictions during the chess feat showcase a level of FSIQ necessary for their execution, the ability to make predictions in chess, has been shown to not have such a major correlation to FSIQ

8) In the first paragraph of this part for the document , the author states that Ayanokoji's feats are borderline inhuman, even in a fictional context.
If you think this is borderline inhuman, even in a fictional context then let me tell you, this is avg. Human level.
Super GMs' bullet chess playing ability is so good that they predict almost all of their opponents moves and win the game with godly tactics and insane levels of planning whilst having ten seconds on the clock to play a hundred moves. Even though I'm capable of doing these so-called 'borderline inhuman feats'. This should be enough to render this statement as irrelevant, wrong and invalid.
"Finally, I would add that each process which led to each predicted move is considered deductive reasoning. Here is the rough process:" which then is followed by a list.
Chess is not based mainly on deductive reasoning. Deductive reasoning constitutes a small part of a person's chess playing ability. Chess mainly is concerned with problem solving ability and divergent + convergent thinking, then a small part consists of almost all FSIQ indexes

followed by some types of reasoning but it is mainly just problem solving, convergent + divergent thinking and board awareness.
There are some contradictions stated in the list items as well : -
"Deduces his winning path based on his understanding of Arisu's ability"
Truth is "Calculates the winning line based on his understanding of the position whilst being dependent upon his problem solving skills"
Some contradictions in this part as well but we'll let them slide.

-


8. Farhen starts by calling my assessment of Ayanokouji's skills at inhuman level wrong and counters by claiming he is below top bullet players. He also claims he is capable of performing similar levels of what I consider inhuman feats, however he failed to provide any evidence of anyone matching Ayanokouji's level of predictions. Then he makes the claim that chess isn't based on deductive reasoning which just goes to show his lack of understanding regarding deductive reasoning. In chess, deductive reasoning is utilized as players apply general principles to specific situations including opening theory, where established moves are selected based on known favorable outcomes, tactical play, where players recognize patterns and deduce optimal moves. Endgame principles, positional understanding, and calculating variations also involve deductive reasoning, contributing to players' strategic decision-making throughout the game. While divergent thinking and problem solving play a role, there is plenty of deductive reasoning seen in high level chess play.

8] This part of the document is addressed to the part where I've stated that Ayanokoji prediction feat is average and chess isn't based on deductive reasoning.

Before starting, I'll already state that maybe the author/authors still have the wrong idea that 'predicting moves' is the same as 'analyzing ahead'. I've already stated in 2) and 2] what the difference is, how it is not stated in the LN and how their arguments are completely wrong.

'Farhen starts calling my assessment of Ayanokouji's skills at inhuman level wrong and counters by claiming he is below top bullet players. He also claims he is capable of performing similar feats of what I consider inhuman feats, however he failed to provide any evidence of anyone matching Ayanokouji's level of predictions'

A pathetic and flawed argument combined with misinterpretations. What I've said in my original document is 'If you think this is borderline inhuman, even in a fictional context then let me tell you, this is avg. Human level.
Super GMs' bullet chess playing ability is so good that they predict almost all of their opponents moves and win the game with godly tactics and insane levels of planning whilst having ten seconds on the clock to play a hundred moves. Even though I'm capable of doing these so-called 'borderline inhuman feats'.

I never said I'm below top level bullet player, I've said that this feat is so average that even I'm capable of replicating it. Predicting opponent's moves one by one is pretty easy even for lower class players. On the other hand, GMs and super GMs are certainly capable of performing feats far better than this. Since I've 'not given examples' even though I literally included some

examples in 1) that they completely dismissed, I'll also include examples that are far better than this :

https://youtu.be/CxJOXta7ZIM?si=rvGGaxQ9DSxpnchz
https://youtu.be/99FJkcYC2rs?si=gIrDKldMCMmVydB4
https://youtu.be/8u77NdOawlI?si=utV5UH3ThAHxUDkw
https://youtu.be/PNQDJdjgkdU?si=Uaw8tdFTCIFubq26
https://youtu.be/w2PEkd1YQZY?si=furoYv-s7SiATUqL

(In some examples, they're literally playing by hand)
These examples should be enough to satiate your thirst for 'not providing examples'

Elaborates on why deductive reasoning plays a huge part in chess

These are some bad arguments to prove your points and a general lack of understanding and knowledge. I'll explain in detail.

A Chess game has three parts, Opening, Middlegame and Endgame. I'll explain what part of the game correlates with which psychological process

The opening is the starting phase of the game. The opening theory is mostly memorized in high level play and even if new innovations and novelties are invented and discovered, these are still incorporated with knowledge.
Processes involved : WMI, VSI and Knowledge.
This is easily known by everyone. It doesn't even require any proof. If you still want a proof, simply search 'Bobby Fischer on why he hated Chess'. This is not a joke of some sort; I'm dead serious.

The middlegame is the middle part of the game. Middlegame is the part based on WMI + Knowledge (knowing plans of the transition from the opening to the midgame) , Pattern Recognition + Problem solving (for finding tactics and punishing mistakes), Convergent/Divergent thinking + Concrete Reasoning (to find the best move and move-tree analysis of candidate moves) and Deductive reasoning (to find the best response to your move). Also, Middlegame play is also influenced by Experience and opponent's rating / playing strength.
Processes Involved : WMI, VSI, Knowledge, Pattern recognition, Convergent and Divergent Thinking, Problem Solving, Critical thinking, Logical reasoning, Small portions of Concrete reasoning and Deductive reasoning. If you want proof, study the thought process of a GM. Studying the thought process of an average player wouldn't do much as an average player's thinking and thought process is far more irrational and erratic. Some relevant links are here :
https://www.chess.com/forum/view/chess-players/the-thinking-process-of-a-grandmaster
https://herculeschess.com/how-to-think-like-a-chess-grandmaster/#:~:text=Progressive%20Thinking%20is%20one%20of,complicated%20positions%20and%20sharp%20lines.

The endgame is the last phase of the game. Since endgames have essentially been studied from a long period of time, almost all endgames are solved. There's also something called a

TableBase(–szygy–). Endgames are essentially memorized as well. Besides, even if an endgame isn't solved and there's no clear path to victory, the basic endgame principles and preexisting knowledge pave the way. It is based mostly on intuition. So, you have to think of all outcomes and what the best response is to your move.
Processes involved : WMI, VSI, Knowledge, Convergent/Divergent Thinking, and Intuition.
If you want proofs, simply search up ‘szygy TableBase’ and ‘Chess Endgames’. Book like ‘Dvoretsky's Endgame Manual’ is also a concrete proof.

What was the point of all this? Well, what I'm trying to stress on is that chess basically isn't as much of ‘deductive reasoning’ as these guys have presented. Deductive reasoning constitutes a small part of chess playing ability. I've also stated this in my document, as in “Chess is not based mainly on deductive reasoning. Deductive reasoning constitutes a small part of a person's chess playing ability.”
Now having said all of that, the author just stresses on the fact that ‘There is plenty of deductive reasoning at top level play’. He doesn't state in what part of the game deductive reasoning is seen plenty. He essentially is saying that the entire game is constituted on deductive reasoning which is false. Since in the ‘rebunk’ document he thinks that the game in this particular context is ‘around midgame’ but in his original CF document, he says the game is in the endgame (as in the exact words of the original CF document "Considering that the game's progression was halfway done when they began to handle the reins. And that profession players' endgames are full of temporization and gauging moves, we can assume that there were still a fair amount of pieces and pawns on the board") This statement isn't even relevant since both contexts contradict each and only the middlegame is reasoned on ‘deductive reasoning’ and even then, it only constitutes a small part of the playing ability.

I'll also say this important thing right here. The concept of choosing the best move isn't deductive reasoning. It’s mostly convergent and divergent thinking + problem-solving. Look :

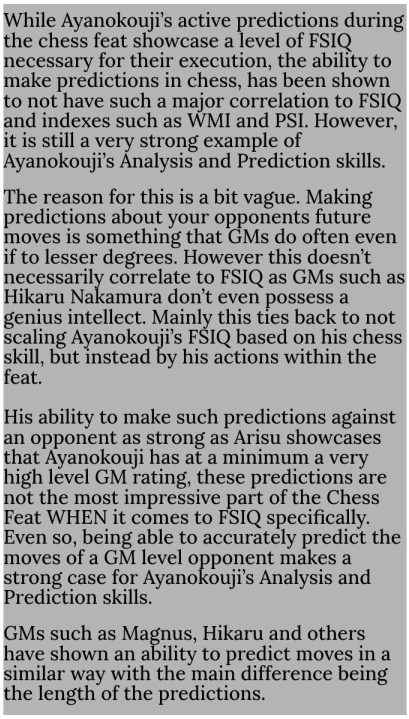
> Our findings don’t mean learning to play chess has no benefits for cognitive skills. There are many different types of thinking and measures of intelligence we do not yet fully understand. This is especially relevant in a world where conceptual thinking has become such a vital skill.
>
> The different ways of thinking associated with the benefits of chess may include creative thinking, critical thinking, logical thinking, intuition, logical reasoning, systemic thinking, strategic thinking, foresight, convergent thinking, analytical thinking, problem solving and concentration.

This is taken from :
https://theconversation.com/most-people-think-playing-chess-makes-you-smarter-but-the-evidence-isnt-clear-on-that-119469#:~:text=The%20different%20ways%20of%20thinking,thinking%2C%20problem%20solving%20and%20concentration.

Don't mistake cognition with deduction.
Keep in mind that in deductive reasoning; we completely discard statements irrelevant to us, to reach a conclusion but in processes related to chess, we don't completely discard moves that are irrelevant, we simply give more importance to moves that we consider more sound.

'There is plenty of deductive reasoning seen in high level play.'
Yeah, even if the whole statement is wrong, I'll still agree with it just because Kiyotaka and Arisu aren't highly rated lol.

This part of the 'rebunk' document is wrong because of flawed understanding and perception of deductive reasoning, lack of information and mistakes on author's part. Ad hominem is also committed here. My point remains completely.



While Ayanokouji's active predictions during the chess feat showcase a level of FSIQ necessary for their execution, the ability to make predictions in chess, has been shown to not have such a major correlation to FSIQ and indexes such as WMI and PSI. However, it is still a very strong example of Ayanokouji's Analysis and Prediction skills.

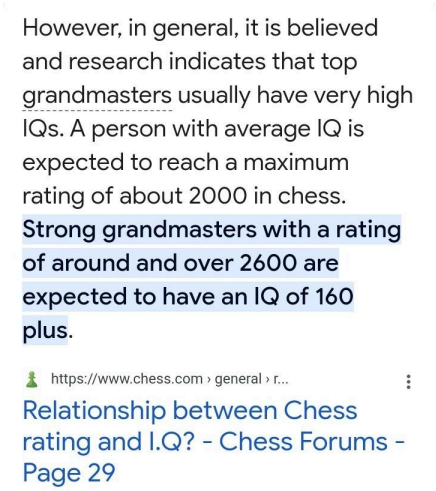
The reason for this is a bit vague. Making predictions about your opponents future moves is something that GMs do often even if to lesser degrees. However this doesn't necessarily correlate to FSIQ as GMs such as Hikaru Nakamura don't even possess a genius intellect. Mainly this ties back to not scaling Ayanokouji's FSIQ based on his chess skill, but instead by his actions within the feat.

His ability to make such predictions against an opponent as strong as Arisu showcases that Ayanokouji has at a minimum a very high level GM rating, these predictions are not the most impressive part of the Chess Feat WHEN it comes to FSIQ specifically. Even so, being able to accurately predict the moves of a GM level opponent makes a strong case for Ayanokouji's Analysis and Prediction skills.

GMs such as Magnus, Hikaru and others have shown an ability to predict moves in a similar way with the main difference being the length of the predictions.

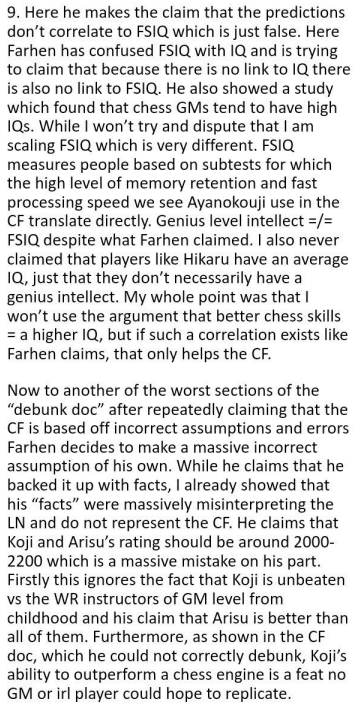
9) This part of the document is perhaps the most outrageous. While there is nothing wrong with the first paragraph which states that the ability to make predictions in chess doesn't correlate to a higher FSIQ (with which I wholeheartedly agree, it has a small impact but not a considerable impact) but it is the second paragraph where another series of incorrect statements follows.
"Making predictions is something even GMs do to a lesser degree, However this doesn't correlate to FSIQ as GMs such as Hikaru Nakamura don't even possess a genius level intellect"

"Making predictions is something even GMs do to a lesser degree".
Correct would be "Making predictions is something even GMs do to a far more higher degree than this crap".



Currently, Hikaru has a rating of >2750
Hikaru Nakamura sets the record for human benchmark test :
https://www.youtube.com/watch?v=2WsEQuoOz-c
Believing that GMs don't have a great FSIQ is naïve, there are only some exceptions like Nigel Short (who has an IQ of 110)
The author presumed that Hikaru has an average IQ because it is the first thing that comes up when searching 'Hikaru Nakamura IQ' , but this test was never conducted under professional authority and wasn't under supervision. He could also be lying. He clearly has to have an IQ of above 140. Besides he is the embodiment of Bullet Chess Gods that I mentioned in 8) meaning he has a godly PRI, PSI, TRI, NVI and GAI.
The author clearly suffers from a lack of information. We'll proceed, This statement is also invalid.
In the third paragraph, author states "his ability to make such predictions against a strong opponent like Arisu showcases that Ayanokouji has at a minimum a very high level GM rating"
[(As I proved by facts and truth in 5)], the average ELO of both players was an estimated 2100 assuming that everything is valid (which it most likely isn't and both players are rated much lower but I'll get canceled for saying this)
So, [Arisu Rating + Kiyotaka Rating] / 2 = 2100 ,
Since Arisu is inferior to Koji, Hence Arisu has the lower rating.
Thus, Kiyotaka Rating = 2200 and ;
Arisu Rating = 2000.
Clearly, Ayanokoji performance in this game is nowhere near GM level and is most likely Candidate Master level and nothing more than that And Arisu's performance Is Women's Candidate Master level.

-



9. Here he makes the claim that the predictions don't correlate to FSIQ which is just false. Here Farhen has confused FSIQ with IQ and is trying to claim that because there is no link to IQ there is also no link to FSIQ. He also showed a study which found that chess GMs tend to have high IQs. While I won't try and dispute that I am scaling FSIQ which is very different. FSIQ measures people based on subtests for which the high level of memory retention and fast processing speed we see Ayanokouji use in the CF translate directly. Genius level intellect =/= FSIQ despite what Farhen claimed. I also never claimed that players like Hikaru have an average IQ, just that they don't necessarily have a genius intellect. My whole point was that I won't use the argument that better chess skills = a higher IQ, but if such a correlation exists like Farhen claims, that only helps the CF.

Now to another of the worst sections of the "debunk doc" after repeatedly claiming that the CF is based off incorrect assumptions and errors Farhen decides to make a massive incorrect assumption of his own. While he claims that he backed it up with facts, I already showed that his "facts" were massively misinterpreting the LN and do not represent the CF. He claims that Koji and Arisu's rating should be around 2000-2200 which is a massive mistake on his part. Firstly this ignores the fact that Koji is unbeaten vs the WR instructors of GM level from childhood and his claim that Arisu is better than all of them. Furthermore, as shown in the CF doc, which he could not correctly debunk, Koji's ability to outperform a chess engine is a feat no GM or irl player could hope to replicate.

9] This part of the document is apparently claimed by the author to be 'the worst section of the entire CF debunk document', and that I've done no good job on debunking this feat.

Before everything else, I'll say this right now that here is the second of two minor mistakes in my original document. I've confused him saying that 'GMs like Hikaru Nakamura don't even possess a genius intellect' with Hikaru's IQ being average. I'm sorry for committing this mistake. That being said, it has no relation to what I'll proceed with.

'Here he makes the claim that the predictions don't correlate to FSIQ which is just false. Here Farhen has confused FSIQ with IQ and is trying to claim that because there is no link to IQ, there's also no link to FSIQ' and elaborates...
Look at what I've stated in my original document, 'While there is nothing wrong with the first paragraph which states that the ability to make predictions in chess doesn't correlate to a higher FSIQ (with which I wholeheartedly agree, it has a small impact but not a considerable impact)... '.
You see it, don't you?
The author has first in the original CF document stated that 'the ability to make predictions in chess is not shown to have a major correlation with FSIQ, and indexes such as WMI and PSI'
In my response to CF document, I've said 'While there is nothing wrong with the first paragraph which states that the ability to make predictions in chess doesn't correlate to a higher FSIQ (with which I wholeheartedly agree, it has a small impact but not a considerable impact)... '
When I agreed with it, he in this 'rebunk' document has now denied his own statement as in 'Here he makes the claim that the predictions don't correlate to FSIQ which is just false. Here Farhen has confused FSIQ with IQ and is trying to claim that because there is no link to IQ, there's also no link to FSIQ' and elaborates...

So first he made a statement, I agreed to it and now in the ‘rebunk’ document; he denies it by stating that ‘IQ isn't the same as FSIQ’. I haven't even challenged his argument and he denied it himself in his ‘rebunk’ document, then blamed it on me by saying that ‘IQ isn't the same as FSIQ’, which I never claimed let alone make a statement about it. This is just hilarious now. Again, they have denied their own argument and blamed it on a fucking sleeping bird on a damn window. Making predictions comes from Concrete Reasoning, not any FSIQ index. This is common sense; there's no need to show a proof here. I've also stressed on this in the previous part. Refer to 8) and 8]. The only FSIQ indexes associated with chess in general are VSI and WMI, but in making predictions, it's none.

‘My whole point was that I won't use the argument that better chess skills = higher IQ, but if such a correlation exists like Farhen claims, that only helps the CF’
Two bad arguments. It isn't that better chess skills = higher IQ. It's the best chess skills = higher IQ. What I've mentioned in my document is the correlation between the IQ of Super GMs (the top best and elite players) and their playing abilities, not an average master. For an average master, this doesn't apply.

I've also repeatedly stated in this document why we have to discard statements about Koji. Thus, nothing helps CF because Koji has performed more or less just an above average chess master. I've already proven this in 5) but I'll further elaborate in the next part of this document.

‘Now to the worst sections of the debunk document, after repeatedly claiming that the CF is based off incorrect assumptions and errors Farhen decides to make a massive incorrect assumption of his own. While he claims it is backed up with facts, I've already shown that his “facts' ' we're massively misinterpreting the LN and do not represent the CF. He claims that Koji and Arisu ratings should be around 2000-2200 which is massive mistake on his part‘

As I've already shown up until now, all of my points are correct, valid and true in every context. Still, there are some things I'd like to address.

How I came up with the 2000 & 2200 ratings of Arisu and Koji respectively.
It is stated that the WR is affiliated with a political party called the ‘Citizen's Party’. I'm just going to say this right here right now. WR being associated with the ‘Citizen's Party’ point may be wrong but in any case, WR is associated with a political party and that's the main point.
What is a ‘political party’?
Well essentially, A political party is an organization that coordinates candidates to compete in a particular country's elections.
This means that the Citizens Party (or the political party) is of Japan only and the WR has political access to Japanese resources only.
It has also been stated that Koji and Arisu were taught to play chess in the WR.
This means that both were taught to play chess by Japanese players only. (Some arguments about WR having international players are addressed in miscellaneous statements debunk)
Now, we can find out their estimated ratings just by calculating the average Elo of Japanese professional chess players. While this isn't a completely true estimate, it should tell us about

the strength of the players that Koji and Arisu played, and how much their respective ratings should be.
The list of Japanese professionals with Classical/Standard Elo is as follows :

A
Mirai Aoshima
Current Elo : 2367
H
Yoshiharu Habu
Current Elo : 2399
K
Shinya Kojima
Current Elo : 2296
M
Toshiyuki Moriuchi
Current Elo : 2310
N
Emiko Nakagawa
Current Elo : 1778
Ryosuke Nanjo
Current Elo : 2346
T
Naoko Takemoto
Current Elo : 1903
Trần Thanh Tú
Current Elo : 2386
U
Shinsaku Uesugi
Current Elo : 2300
W
Miyoko Watai
Current Elo : 2032
Akira Watanabe (chess player)
Current Elo : 2284

The list of players is taken from
https://en.m.wikipedia.org/wiki/Category:Japanese_chess_players
And their standard ratings are taken from https://ratings.fide.com/

It should also be noted that all these players are ‘professional’ in the sense that they are masters or are titled.
Why is Hikaru not included? It's because Hikaru is only ‘born’ Japanese. He has spent all his life in America, considers himself an American citizen, plays under the American flag and has represented America in Intl. Olympiads.

Average of all player's ratings is as follows

(2367+2399+2296+2310+1778+2346+1903+2386+2300+2032+2284) ÷ 11 = 24401 ÷ 11 = 2218.272727 ≈ 2218

Now, we know that Kiyotaka is far superior to Arisu as pointed out from the game in ESE and also from statements. Arisu is inferior.
Thus Kiyotaka's rating = 2200
And Arisu's rating = 2000
A 200 point rating difference is considered far superior, A 100 point rating difference is considered superior and A 50 point rating difference is considered better.

Why is this correct?
There are many reasons why this is correct. I'll state them :
Δ Kiyotaka and Arisu made overextending pawn moves as shown and proven in 5) and 5], thus they are not IM or GM level in the slightest.
Δ Kiyotaka and Arisu had a chaotic position with heavy imbalances, suggestive of lack of elegant and concrete play, as proven in 5) and 5].
Δ Kiyotaka making the naïve statement about the ‘game deviating from his path’, suggestive of lack of proper information.
Δ Kiyotaka making 68 one-move predictions for a span of 5 minutes, an average feat which is far inferior to IM or even FM level play. Already proven in 2) and 2].
Δ High ambiguity and lack of proper information about the chess game, already stated in 1) and 1]
Δ Arisu getting herself in a mating net, proven in 5) and also complemented by Koji stating ‘She still had moves she could make to escape it, but those were few in number'.
Δ Kiyotaka making a move better than a ‘machine’
Δ One change by Tsukishiro caused the entire result of the game to be changed, even after the Key position.
Δ Kiyotaka conveniently having two opportunities to play for wins.
Δ There's also a pretty funny thing to be noted here. In the LN at a point, Koji stated ‘She still had moves she could make to escape it, but those were few in number'. What he's saying is that Arisu was a move away from being checkmated, but she still couldn't find it as is evident later since Tsukishiro had to intervene.

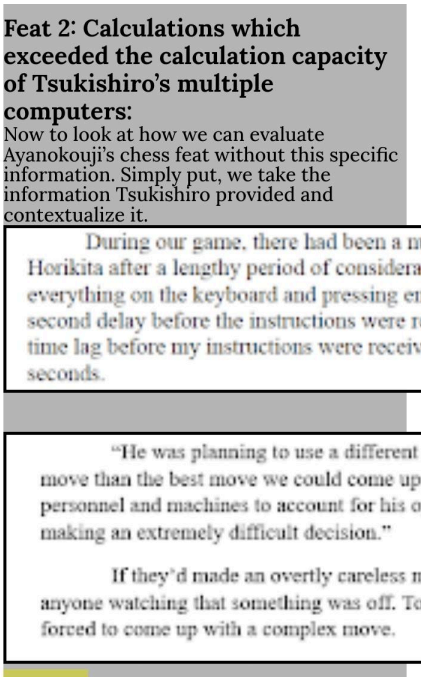
Everything has been taken from Huntsman's document itself. You can check it yourself. I've deduced things from it.

All of the above-mentioned statements prove my calculations to be completely credible, and also stress on the fact that Kiyotaka and Arisu are nowhere near even IM level. I've repeatedly also stressed on the fact that Koji and Arisu's statements from WR to be discarded. This is not the case here as I simply only considered the statement that they studied chess in WR, I didn't consider any statements about their playing strengths or chess achievements.

‘Koji's ability to outperform a chess engine is a feat that no GM or irl player could hope to replicate’
This is just getting comical now.

Throughout my document, I've given more than 7+ IRL examples where humans outperformed engines of the 21st century and also included a whole damn document about positions that computers don't understand. This is simply evocative of the fact that these guys had a mundane attitude towards my document and somehow wanted to debunk it.

Hence, the author's logic in this 'worst part of the "debunk doc" is hopelessly flawed beyond comprehension and completely wrong. My point remains.



Feat 2: Calculations which exceeded the calculation capacity of Tsukishiro's multiple computers:

Now to look at how we can evaluate Ayanokouji's chess feat without this specific information. Simply put, we take the information Tsukishiro provided and contextualize it.

During our game, there had been a n
Horikita after a lengthy period of considera
everything on the keyboard and pressing en
second delay before the instructions were r
time lag before my instructions were receiv
seconds.

"He was planning to use a different
move than the best move we could come up
personnel and machines to account for his o
making an extremely difficult decision."

If they'd made an overtly careless n
anyone watching that something was off. To
forced to come up with a complex move.

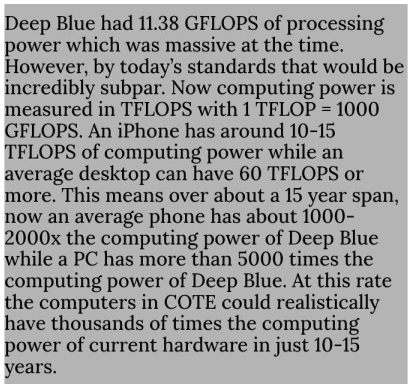
10) This part of the document was very lengthy and scales the feat of Kiyotaka's "calculations which exceeded the calculation capacity of Tsukishiro's multiple computers." {For reference, I won't say what the author says as it will take a lot of time and will only highlight major errors and wrong and nonfactual assumptions. }
As I said and proved in 1), Information is necessary; otherwise this feat scales nowhere. But still let's see what the author has to offer.

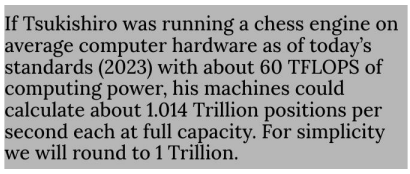
-

10. Here he didn't challenge anything.

In this part of the document, they state that I haven't challenged anything.

This is just a lie, because I've stated 'As I said and proved in 1), Information is necessary; otherwise this feat scales nowhere. But still let's see what the author has to offer.' Information is necessary, otherwise this 'feat' is just assumptions. My point remains.





11) Here are some facts which are completely true (though I advise people to not look at information through Quora).

In the second picture provided above, the author says "If Tsukishiro was running a chess engine with average computer hardware as of today's standards (2023) with about 60 TFLOPS of computing power, his machines could calculate 1.014 Trillion positions per second each at full capacity. For simplicity, we'll round to 1 Trillion"

You see, in the original document, the author includes a post from Quora that says "The current most powerful supercomputer (Tianhe - 2) has a performance of 33.86 PFLOPS which would be able to calculate 600 trillion positions per second. This seems like a lot but considering that a position has around 35 legal moves, given 3 minutes such a computer would be able to calculate every single position upto 11 plies (Half-moves). I believe Deep Blue should've been able to calculate approximately a billion positions per second if it didn't have to evaluate them."

So, Author says Tsukishiro's computers would be able to calculate 1 trillion positions per second.

First of all, 1 Trillion moves per second is Tsukishiro's computers' calculating capacity. Realistically, a chess engine of 2023 doesn't calculate positions by means of brute force computations. Nowadays, advanced chess engines like Stockfish, Torch, Ethereal etc use pruning which is a move tree generation algorithm that discards significantly bad positions, causing the entire 'bad' or 'worse' leaf node to be discarded and thus works significantly better than chess engines that use brute force computations and waste time evaluating bad positions. Thus, nowadays the depth of Tsukishiro's computers should be around 8 plies per second or simply a depth of 8.

This is evident from the Perft results table. Perft is a debugging function used in chess engine programming which is used to direct the move generation tree to strictly legal moves and to nodes at a certain particular depth. Perft is an abbreviation for 'Performance Test for move path enumeration'. Perft gives a relationship between legal moves, depth and all kinds of special moves. It also lists the number of total games that could arise.

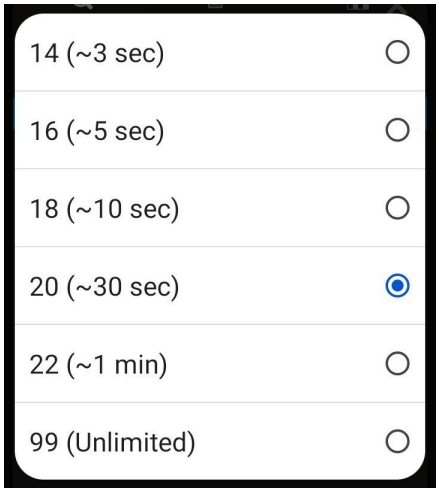
rnbqkbnr/pppppppp/8/8/8/8/PPPPPPPP/RNBQKBNR
w KQkq - 0 1

Depth	Nodes	Captures	E.p.	
0	1	0	0	
1	20	0	0	
2	400	0	0	
3	8,902	34	0	
4	197,281	1576	0	
5	4,865,609	82,719	258	
6	119,060,324	2,812,008	5248	
7	3,195,901,860	108,329,926	319,617	
8	84,998,978,956	3,523,740,106	7,187,977	
9	2,439,530,234,167	125,208,536,153	319,496,827	1
10	69,352,859,712,417			
11	2,097,651,003,696,806			
12	62,854,969,236,701,747 [4]			
13	1,981,066,775,000,396,239			
14	61,885,021,521,585,529,237 [5]			
15	2,015,099,950,053,364,471,960 [6]			

```
r4rk1/1pp1qppp/p1np1n2/2b1p1B1/2B1P1b1/P1N
w - - 0 10
```

Depth	Nodes
0	1
1	46
2	2,079
3	89,890
4	3,894,594
5	164,075,551
6	6,923,051,137
7	287,188,994,746
8	11,923,589,843,526
9	490,154,852,788,714

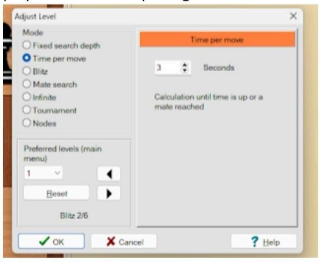
[Here is the link to the website :
https://www.chessprogramming.org/Perft_Results]
We see that the two trillion hallmark (two trillion nodes essentially means two trillion moves calculated) from the initial position is reached at depth 9. In position 6, an eleven trillion hallmark from a random position is reached at depth 8. Thus, depth isn't relative to no. of positions that could be calculated in a second. For reference here, we'll take 1 Trillion Positions Calculated Per Second as depth 8 (realistically it could be as lower as 6)
So, Tsukishiro's computers' depth = 8 for 1 sec.



Consider Stockfish 16's pruning algorithm (taken from chess.com website), and we can deduce further depth for Tsukishiro's computers, since the author presumes that Tsukishiro's computers are average desktop computers of 2023.
So, Stockfish's depth is as follows :
14 (~3 sec)
16 (~5 sec)
18 (~10 sec)
20 (~30 sec)
22 (~1 min)
99 (Unlimited)
Thus, Tsukishiro's Computers' depth would be as follows :
10 (~3 sec)
12 (~5 sec)
14 (~10 sec)
16 (~30 sec)
18 (~1 min)
99 (Unlimited)
(A depth of 99 plies is given an unlimited time because it's inherently impossible for any supercomputer, even after a Millenium of years as the approximate total no. of chess positions exceeds the total estimated no. Of atoms in the observable universe)
So, 1 Trillion positions per second is exactly just a depth of 8 plies per second at any random position.
Now what does that mean for this feat?
Since the move Ayanokouji made (which was better than the best move Tsukshiro's computers could come up with), took a minute. Hence he outcalculated the computers when they were calculating for a depth of 1 min. From our deductions we know that Tsukshiro's computers calculate at a depth of 18 per minute. This means that Ayanokouji outperformed the computers at depth 18, which is far inferior than the examples stated in 1). So, Ayanokouji's feat of making a move better than the computer doesn't even come close to beating our real life examples. This is an invalidation of what the author states later in the document. I've not considered the fact that his move took 30 seconds to reach Horikita which means the computer only calculated for 30 seconds.

-

11. In this part Farhen begins to challenge the Quora post which talks about a modern supercomputer, however this is completely irrelevant to the CF. The only data I took from this page was the information about Deep Blue. I made this clear in the CF doc, but he seemed to miss that fact. I made my calculations based on the computing power of an average 2023 computer, not a theoretical supercomputer. This can also be seen in my CF calculations themselves. So his challenge of the legitimacy of using that computer's stats for CF calculations is unnecessary since I didn't use it in the CF anyway.
Now onto the main part of this section where he shows the Perft chart. I am no expert on chess programming or programming in general, but I can certainly call into question the legitimacy of using this to represent engine calculations. According to him, calculating 1 trillion positions per second represents depth 8 and calculating for 30 seconds leads to a depth of 18. His reasoning claims that Tsukishiro's computers calculate at depth 18 and as such it doesn't even come close to irl computers. What he failed to take into consideration is that his entire line of reasoning is nonsense. My estimations of the CF computer capabilities came from estimating the calculation potential of average computers in 2023 running a chess engine. By his own logic, many chess players should be superior to the likes of stockfish because that was the basis of calculating the CF. Furthermore, his calculations are ridiculous since Tsukishiro was using multiple computers and just running my own PC. I can calculate at FAR higher depth than he claims we should be able to. Using Stockfish 16 NNUE running on the Arena GUI, if I allow it to calculate for only 3 seconds before providing a move it still manages to calculate between depth 32-35. My calculations were run by just letting stockfish play moves in the opening.







I ran another test also only letting stockfish calculate for 3 seconds during the midgame and it was able to calculate at depth 28-30.



While my own tests are certainly not the end all be all of chess engine ability, if on just my own computer I can reach much higher than depth 18 in 3 seconds, while Farhen claims the COTE engine, which due to the future timeline is at least as strong and should be much stronger than current engines, can only get depth 18 with 10x the time to calculate I can safely say his own tests are very flawed. This also doesn't consider that Tsukishiro had multiple computers to run his engine which would lead to the COTE calculating at even higher depth. Just for reference I let my PC run stockfish calculating for 30 seconds in a mid game setting, and it was able to FAR surpass depth 18 calculating to depth 37. This is again just to show that the perft table Farhen showed is completely meaningless when evaluating the CF.

11] In this part of the document, they have tried to prove that my statements about Tsukishiro's engines and computers are wrong.

Atrociously bad argument combined with simple misdirection, ducking and avoiding the argument. There are so many reasons why this is wrong. I'll try to list a minority of them :

- Firstly, In the LN, Tsukishiro states ‘I had a significant number of personnel and machines to account for his options’. As one can clearly see, the word ‘machines’ is used and the word ‘computers and/or computer’ isn't used in the slightest. (I already knew this fact and tried to just proceed without putting it forward) . A ‘machine’ could be a desktop computer. A ‘machine’ could also be a laptop computer. A ‘machine’ could also be a smartphone. The meaning of ‘machine’ is subjective to interpretation. It was never stated whether the ‘machine’ is a desktop, laptop, tablet, a smartphone or just about any device. Arguments like ‘but Koji is the masterpiece of WR!!!!!, you think they'd use a SMARTPHONE!!?!!?!!!’ are just wrong and attempts at trying to assume the ‘machines’ to be devices with very good computational power. Since you guys have an affinity for using Discord bots for translations even when there are more than a hundred available sources with translations, I've already given two other sources which have the word ‘machines’ or ‘a dedicated machine’ shown.
- Secondly, there's completely no mention of the word ‘chess engine’. It is evident from the LN itself. The author/authors of the ‘CF document’ simply assume that Tsukishiro's ‘machines’ would have the ‘best’ chess engines, even though it is literally not even stated and has been created out of thin air.
- Thirdly, since there's no mention of any chess engine. We also don't know the mechanism the engine uses, if they used any engine. We don't know whether the computer uses brute force computations, Alpha - Beta search method - minimax algorithm, Alpha - Beta pruning, AI - Artificial Intelligence (machine learning), Reinforcement learning, win probability calculation, centipawn evaluation or NNUE (efficiently updatable neural network). Arguments like ‘-but.. -but.. COTE... takes place IN FUTURE!! obviously the engines would use pruning you MORON!! All his calculations are correct!’ are simply an attempt to provide fan service, because many of the best chess engines like Komodo, Shredder, LC0, Torch etc use totally different mechanisms like Win probability calculation, Centipawn evaluation, reinforcement learning, AI learning respectively and so on. This has been explained in detail in Agent's own document. Obviously the authors don't know this because they're trying to justify their claims by stating my ‘lack of knowledge’, when these guys would have just heard these terms.
- Fourthly, since there are no explicit statements regarding ‘machines’. It is also wrong to assume their hardware capabilities would be similar to the best desktop computers in the future timeline, let alone current timeline. As ‘machines’ could simply be tablets or smartphones.
- Fifth, as there's no mention of an engine, this also means that Tsukishiro’s ‘machines’ having ‘engines’ (created out of thin air) wouldn't even have the latest versions.
- Sixth, We are in ANHS not WR. There are several arguments that are frequently assuming device capabilities to be far more good and better because of WR’s expense capacity and influence. Some people also bring up the fact that Tsukishiro has brought ‘very good computers’ with himself from the WR. This is simply not stated in the LN and are attempts to coerce an audience into believing assumptions.

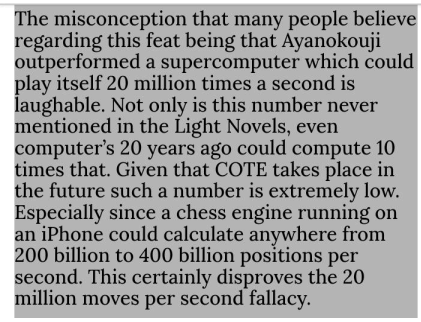
- Seventh, as there isn't any mention of a chess engine, that's exactly why we wouldn't know it's playing strength and depth configuration.

All of these above reasons are why I presented the Perft Table and deduced their ‘machines’ depth. That being said, there's no reason for you to believe in that argument because that's one of the best case scenarios for COTE in itself. Whatever examples the author has presented is simply ducking and misdirecting the average person into believing his lies.

Is the Perft table and your deductions correct in this context?
Yes, refer to 2}.

Besides in his examples there are several intricacies, He has used SF NNUE, most commonly we just use SF and not the neural network. The neural network boosts SF’s calculating capabilities by over 70% on even a below average desktop or laptop. Besides the first two examples are simply from the opening. The first example is Indian Game : Catalan opening, The second example is Indian Game : Bogoljubov Indian defense or as it is commonly known, Bogo Indian defense. In these examples we have also not considered the fact that in Arena GUI, it has the ability to easily infuse a pre-built opening database. Besides the most common thing is that Arena GUI presents the chess board on a small area and more than half of the display screen is occupied by evaluations and lines. In these examples there's no way to confirm whether the author's engine was really running at 3 seconds with a depth of around 30. Even then it is simply not impressive because he has used the neural network (NNUE). At the bottommost part, there's no mention of depth or time taken to calculate.

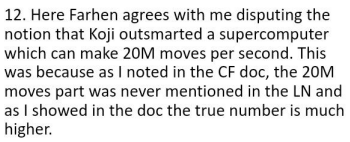
In this part of the document, they have simply ignored the stated and proceeded to show examples. Numerous fallacies are committed here such as Ad Hominem, Ignoring the question, Circular Arguments, Quick Generalization, Red herring, Equivocation and so on. My point remains.


The misconception that many people believe regarding this feat being that Ayanokouji outperformed a supercomputer which could play itself 20 million times a second is laughable. Not only is this number never mentioned in the Light Novels, even computer’s 20 years ago could compute 10 times that. Given that COTE takes place in the future such a number is extremely low. Especially since a chess engine running on an iPhone could calculate anywhere from 200 billion to 400 billion positions per second. This certainly disproves the 20 million moves per second fallacy.

12) Here I must commend the author for disproving another bogus misconception that "Ayanokouji outperformed a supercomputer that could play itself a million times". This is also somewhat of a braindead statement since a supercomputer playing itself is an inherently different thing than a supercomputer calculating millions and billions of positions. The author deserves respect for disproving this fallacy. (Though, maybe he may just be saying the number could be even bigger as he states in the document but since this is irrelevant to our topic, well let it slide.). Also, saying an iPhone could calculate 200 billion - 400 billion positions

per second isn't valid to say, as I have shown in 14). This is an example of trying to say that I have one hundredth of a penny hundred times. Which in reality is just one penny.

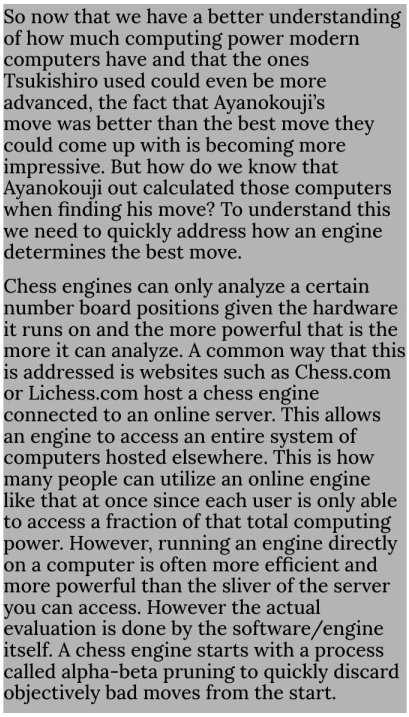
-



12] In this part of the document, they have agreed with me.

'This was because as I noted in the CF doc, the 20M moves part was never mentioned in the LN and as I showed in the doc the true number is much higher.'
You noted in the CF doc? I'm assuming they're saying the 'LN' instead of 'CF doc.'
By this logic, aren't all of your arguments simply not stated?

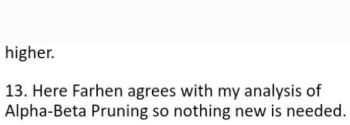
However, it's hilariously bad logic to come up with and say 'as I showed in the doc the true number is much higher'. This is an example of an intellectually disabled logic as I've proven this later in my original document as well as in this document. All of my points remain and 'as I showed in the doc the true number is much higher' is also invalidated.


So now that we have a better understanding of how much computing power modern computers have and that the ones Tsukishiro used could even be more advanced, the fact that Ayanokouji's move was better than the best move they could come up with is becoming more impressive. But how do we know that Ayanokouji out calculated those computers when finding his move? To understand this we need to quickly address how an engine determines the best move.

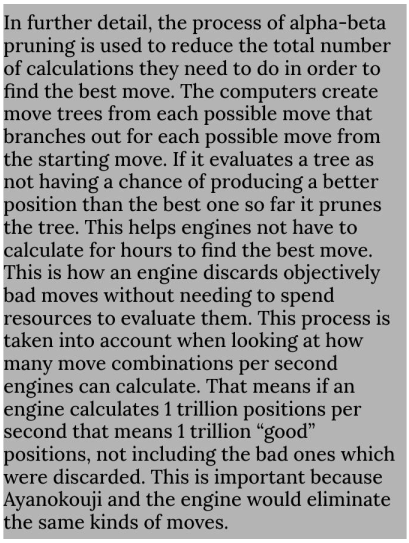
Chess engines can only analyze a certain number board positions given the hardware it runs on and the more powerful that is the more it can analyze. A common way that this is addressed is websites such as Chess.com or Lichess.com host a chess engine connected to an online server. This allows an engine to access an entire system of computers hosted elsewhere. This is how many people can utilize an online engine like that at once since each user is only able to access a fraction of that total computing power. However, running an engine directly on a computer is often more efficient and more powerful than the sliver of the server you can access. However the actual evaluation is done by the software/engine itself. A chess engine starts with a process called alpha-beta pruning to quickly discard objectively bad moves from the start.

13) In the second paragraph of this part of the document, the author states the process of alpha-beta pruning which I also just stated, this is completely true and relevant to our topic.

-



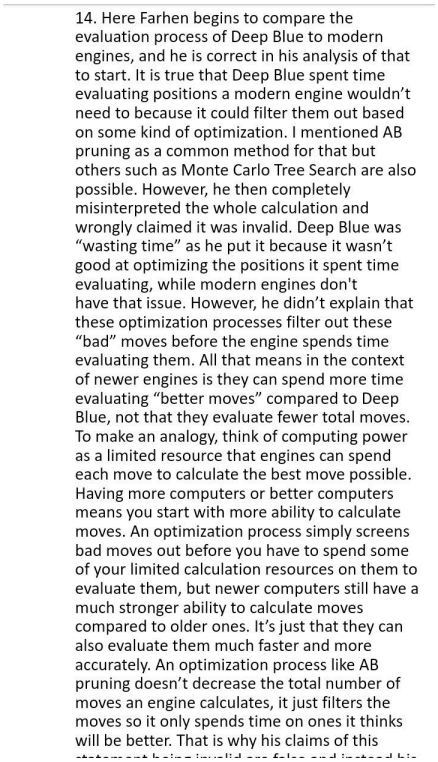
13] *In this part of the document, they/he has agreed with me.*



In further detail, the process of alpha-beta pruning is used to reduce the total number of calculations they need to do in order to find the best move. The computers create move trees from each possible move that branches out for each possible move from the starting move. If it evaluates a tree as not having a chance of producing a better position than the best one so far it prunes the tree. This helps engines not have to calculate for hours to find the best move. This is how an engine discards objectively bad moves without needing to spend resources to evaluate them. This process is taken into account when looking at how many move combinations per second engines can calculate. That means if an engine calculates 1 trillion positions per second that means 1 trillion “good” positions, not including the bad ones which were discarded. This is important because Ayanokouji and the engine would eliminate the same kinds of moves.

14) Here in this part of the document, the author at a point says that "That means if an engine calculates 1 trillion positions per second, that means 1 trillion "good" positions, not including the bad ones which were discarded"
Wrong, as the author multiplied the computing power of Deep Blue. If you multiplied the computing power of Deep Blue and took its no. of positions calculated per second as the relative value, then you will also consider the same conditions for Deep Blue. Since Deep Blue wasted time evaluating and calculating all kinds of positions, including bad and good ones, then it should also mean that Tsukishiro's computers do the same thing. But this is wrong, since engines in 2023 used alpha-beta pruning and thus, they don't calculate 'n' no. of positions in 'x' seconds, but calculate at a depth of 'n' plies. This statement is completely wrong and invalid, and a much better way of saying this would be that "Tsukishiro's computers calculate at a depth of 8 plies and calculate only good moves'' as we literally just proved that 1 trillion positions calculated per second is the same as a depth of 8 plies. Also, if we were to consider the fact that the author actually takes Deep Blue's computing power as 1 billion moves per second (which is without Deep Blue evaluating positions) and not 200 million moves per second (which is with Deep Blue evaluating positions), this becomes even worse of an error. This statement is invalid.

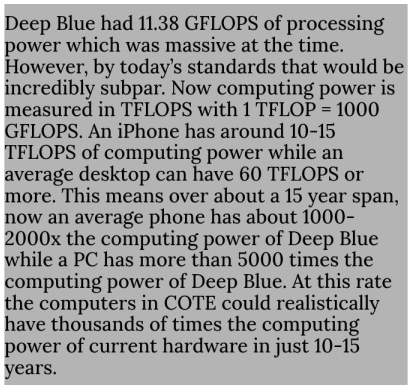
-


14. Here Farhen begins to compare the evaluation process of Deep Blue to modern engines, and he is correct in his analysis of that to start. It is true that Deep Blue spent time evaluating positions a modern engine wouldn't need to because it could filter them out based on some kind of optimization. I mentioned AB pruning as a common method for that but others such as Monte Carlo Tree Search are also possible. However, he then completely misinterpreted the whole calculation and wrongly claimed it was invalid. Deep Blue was "wasting time" as he put it because it wasn't good at optimizing the positions it spent time evaluating, while modern engines don't have that issue. However, he didn't explain that these optimization processes filter out these "bad" moves before the engine spends time evaluating them. All that means in the context of newer engines is they can spend more time evaluating "better moves" compared to Deep Blue, not that they evaluate fewer total moves. To make an analogy, think of computing power as a limited resource that engines can spend each move to calculate the best move possible. Having more computers or better computers means you start with more ability to calculate moves. An optimization process simply screens bad moves out before you have to spend some of your limited calculation resources on them to evaluate them, but newer computers still have a much stronger ability to calculate moves compared to older ones. It's just that they can also evaluate them much faster and more accurately. An optimization process like AB pruning doesn't decrease the total number of moves an engine calculates, it just filters the moves so it only spends time on ones it thinks will be better. That is why his claims of this

14] In this part of the document, they claim to 'debunk' my argument where I stated that Tsukishiro's computers would only calculate normal 1 trillion positions, and not '1 trillion good positions'.

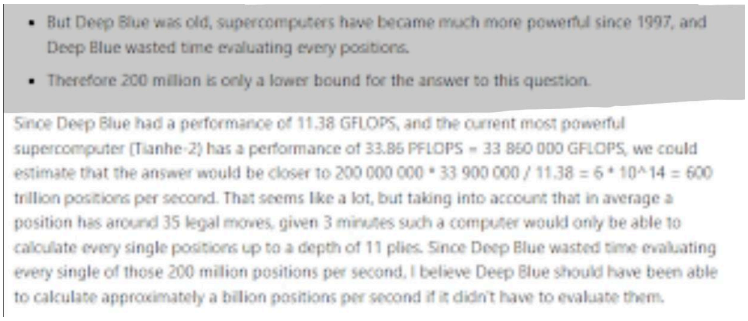
Hopelessly bad argument and flawed perception of the author towards the substance of my argument.
Whatever he has stated here except some points, are all true more or less with some mistakes that I won't elaborate upon, but this isn't what I'm talking about. My point was to show that '1 trillion positions calculated per second' is not the same as '1 trillion good positions calculated per second' even in the slightest. They have simply used statements about 'optimization' and 'screening process' to 'rebunk' their claims. However, since this issue has reached here. I'll completely explain everything in detail :

Here are the pictures from the original CF document.


Deep Blue had 11.38 GFLOPS of processing power which was massive at the time. However, by today's standards that would be incredibly subpar. Now computing power is measured in TFLOPS with 1 TFLOP = 1000 GFLOPS. An iPhone has around 10-15 TFLOPS of computing power while an average desktop can have 60 TFLOPS or more. This means over about a 15 year span, now an average phone has about 1000-2000x the computing power of Deep Blue while a PC has more than 5000 times the computing power of Deep Blue. At this rate the computers in COTE could realistically have thousands of times the computing power of current hardware in just 10-15 years.

If Tsukishiro was running a chess engine on average computer hardware as of today's standards (2023) with about 60 TFLOPS of computing power, his machines could calculate about 1.014 Trillion positions per second each at full capacity. For simplicity we will round to 1 Trillion.

As one can clearly see, the statements of the author are crystal clear.
As I've already stated, the meaning of the word 'machine' is subjective to interpretation. Thus, assuming the 'machine' to be a desktop computer is simply wrong. But I'll still proceed to put forward the flaws in this specific logic.



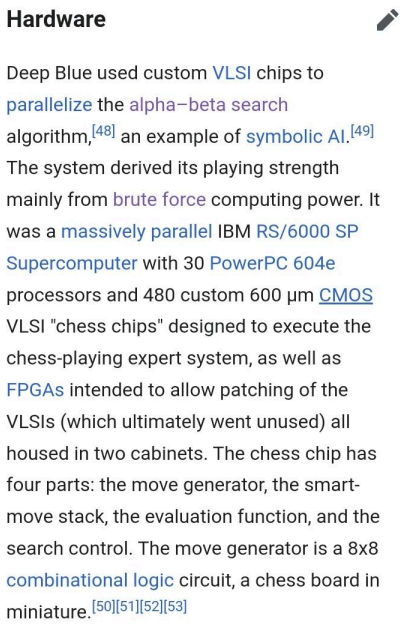
- But Deep Blue was old, supercomputers have became much more powerful since 1997, and Deep Blue wasted time evaluating every positions.
- Therefore 200 million is only a lower bound for the answer to this question.

Since Deep Blue had a performance of 11.38 GFLOPS, and the current most powerful supercomputer (Tianhe-2) has a performance of 33.86 PFLOPS = 33 860 000 GFLOPS, we could estimate that the answer would be closer to 200 000 000 * 33 900 000 / 11.38 = 6 * 10^14 = 600 trillion positions per second. That seems like a lot, but taking into account that in average a position has around 35 legal moves, given 3 minutes such a computer would only be able to calculate every single positions up to a depth of 11 plies. Since Deep Blue wasted time evaluating every single of those 200 million positions per second, I believe Deep Blue should have been able to calculate approximately a billion positions per second if it didn't have to evaluate them.

I'll state everything put forward in the above picture which is relevant to our context. It is taken from CF document itself.

'But Deep Blue was old, supercomputers have become much more powerful since 1997, and Deep Blue wasted time evaluating every position.'
'Since Deep Blue wasted time evaluating every single of those 200 million positions per second, I believe Deep Blue should have been able to calculate approximately a billion positions per second if it didn't have to evaluate them.'

Now I'll put forward some details about Deep Blue.



Hardware

Deep Blue used custom VLSI chips to parallelize the alpha–beta search algorithm,[48] an example of symbolic AI.[49] The system derived its playing strength mainly from brute force computing power. It was a massively parallel IBM RS/6000 SP Supercomputer with 30 PowerPC 604e processors and 480 custom 600 µm CMOS VLSI "chess chips" designed to execute the chess-playing expert system, as well as FPGAs intended to allow patching of the VLSIs (which ultimately went unused) all housed in two cabinets. The chess chip has four parts: the move generator, the smart-move stack, the evaluation function, and the search control. The move generator is a 8x8 combinational logic circuit, a chess board in miniature.[50][51][52][53]

One can clearly see that Deep Blue system derived it's strength mainly from Brute Force computations. This is stated as ‘The system derived its playing strength mainly from brute force computing power’.

Now, let's get to the arguments stated by the author.

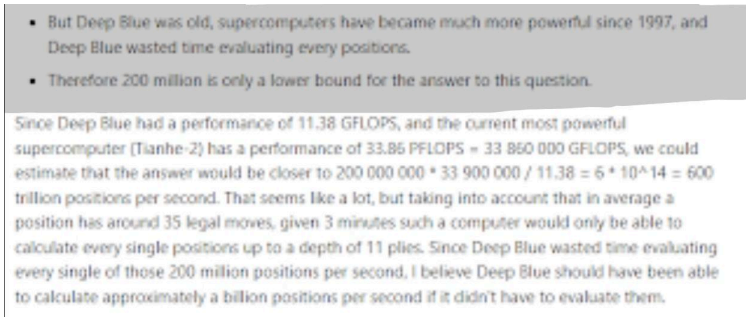
> In further detail, the process of alpha-beta pruning is used to reduce the total number of calculations they need to do in order to find the best move. The computers create move trees from each possible move that branches out for each possible move from the starting move. If it evaluates a tree as not having a chance of producing a better position than the best one so far it prunes the tree. This helps engines not have to calculate for hours to find the best move. This is how an engine discards objectively bad moves without needing to spend resources to evaluate them. This process is taken into account when looking at how many move combinations per second engines can calculate. That means if an engine calculates 1 trillion positions per second that means 1 trillion “good” positions, not including the bad ones which were discarded. This is important because Ayanokouji and the engine would eliminate the same kinds of moves.

‘That means if an engine calculates 1 trillion positions per second that means 1 trillion “good” positions, not including the bad ones which were discarded.
There's a whole array of things wrong with this statement. Worse is the fact that the author proceeds to implement this statement later in his calculations.

Let's see what the author did wrong here.

First, he assumed Tsukishiro's ‘machines’ computing capacity to be 60 TFLOPS. This should be kept in mind that this is total computing power. We know that 60 TFLOPS computing capacity is just about 1 trillion positions calculated without evaluating them.
But now the author is saying that 1 trillion positions calculated per second without evaluation is 1 trillion ‘good’ positions.
This is clearly wrong because 60 TFLOPS is total computing power and the author says that total computing power equates to good positions calculated when this is completely false.

I'll explain in the context of Deep Blue.



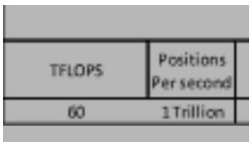
- But Deep Blue was old, supercomputers have became much more powerful since 1997, and Deep Blue wasted time evaluating every positions.
- Therefore 200 million is only a lower bound for the answer to this question.

Since Deep Blue had a performance of 11.38 GFLOPS, and the current most powerful supercomputer (Tianhe-2) has a performance of 33.86 PFLOPS = 33 860 000 GFLOPS, we could estimate that the answer would be closer to 200 000 000 * 33 900 000 / 11.38 = 6 * 10^14 = 600 trillion positions per second. That seems like a lot, but taking into account that in average a position has around 35 legal moves, given 3 minutes such a computer would only be able to calculate every single positions up to a depth of 11 plies. Since Deep Blue wasted time evaluating every single of those 200 million positions per second, I believe Deep Blue should have been able to calculate approximately a billion positions per second if it didn't have to evaluate them.

‘Since Deep Blue wasted time evaluating every single of those 200 million positions per second, I believe Deep Blue should have been able to calculate approximately a billion positions per second if it didn't have to evaluate them.’

This signifies that the total computing power of Deep Blue which is 11.38 GFLOPS means that it could calculate approximately a billion positions without evaluating them.
But as it is evident, it means that the total computing power of Deep Blue is 200 million positions with evaluation.
A person who isn't ophthalmologically disabled can see that with total computing power, Deep Blue could calculate a billion positions per second without evaluating them.
But with evaluating positions, the number drops to 200 million positions per second.

This is the exact reason why the author's logic is flawed. As seen before, 60 TFLOPS are the total computing power of Tsukishiro's ‘machines’. It means that 1 trillion positions calculated are not evaluated. Keep this also in mind :



TFLOPS	Positions Per second
60	1 Trillion

60 TFLOPS equate to 1 trillion raw or unevaluated positions per second. This shows that the computer hasn't evaluated them yet. After evaluation, the number will considerably drop. The author presumes them to be ‘good’ to prove his point. Nor is it stated in the picture provided above. The picture simply says ‘positions per second’, not ‘positions evaluated per second’. There is a difference between calculating a position and calculating a position then evaluating it. When a position isn't evaluated, there is also a considerable chance of the position being illegal. This is evident from this :

> Normally during alpha–beta, the subtrees are temporarily dominated by either a first player advantage (when many first player moves are good, and at each search depth the first move checked by the first player is adequate, but all second player responses are required to try to find a refutation), or vice versa. This advantage can switch sides many times during the search if the move ordering is incorrect, each time leading to inefficiency. As the number of positions searched decreases exponentially each move nearer the current position, it is worth spending considerable effort on sorting early moves. An improved sort at any depth will exponentially reduce the total number of positions searched, but sorting all positions at depths near the root node is relatively cheap as there are so few of them. In practice, the move ordering is often determined by the results of earlier, smaller searches, such as through iterative deepening.

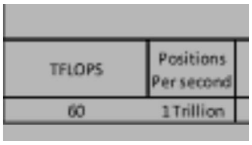
https://en.m.wikipedia.org/wiki/Alpha%E2%80%93beta_pruning
As it is clear, 'In practice, the move ordering is often determined by the results of earlier, smaller searches, such as through iterative deepening'. Iterative deepening is (simply put) creating minimax trees of increasing depth in a loop. Minimax tree algorithm is a previous or should I say older and primitive version of Alpha Beta pruning. Iteration refers to repetition of a process.

> In computer science, **iterative deepening search** or more specifically **iterative deepening depth-first search**[2] (IDS or IDDFS) is a state space/graph search strategy in which a depth-limited version of depth-first search is run repeatedly with increasing depth limits until the goal is found. IDDFS is optimal, meaning that it finds the shallowest goal.[3] Since it visits all the nodes in the search tree down to depth d before visiting any nodes at depth $d + 1$, the cumulative order in which nodes are first visited is effectively the same as in breadth-first search. However, IDDFS uses much less memory.[1]

https://en.m.wikipedia.org/wiki/Iterative_deepening_depth-first_search
As it is also clear, 'Since it visits all the nodes in the search tree down to depth ***d*** before visiting any nodes at ***d + 1***, ... '

As it is evident from information provided above, even though Alpha - Beta pruning is a far better mechanism for chess engines than brute force computations, the move selection in this mechanism is almost the same as brute force computations. This is especially true considering that legality of move generation in chess engines is broadly generalized into Pseudo-legal moves and Legal moves. (Nowadays, there are also many other different move generation methods like quiescence, staged move etc.) Hilariously enough, the two broad move generation implementations are also pretty primitive considering the fact that a developer has to call for a move-make function again to test a move again. The move generation in case of engines hasn't been shown much consideration since the advent of reinforcement learning engines like AlphaZero and LC0 as neural network based engines are starting to be used more in practice. That being said, in COTE's LN, no engine is mentioned. This further solidifies my argument.

If you didn't understand what I said above, what I'm trying to say is that engines that calculate through brute force computations and engines that calculate through alpha - beta pruning have the same mechanism for selecting moves. The generation of moves in both mechanisms is also the same regardless of a computer's calculation capacity.
It means that without an engine's evaluation, a position could very well be illegal.



That being said, the picture above can also just simply not be trusted because they/he hasn't provided any source to this. It may very well be taken from an unreliable source.

If you still didn't understand any of what I just said, I'll say it in a completely simplistic manner :
Suppose there's a bag of sugar that was spilled in a street. Now; all of these sugar grains are not fit for consumption, as most of them are dirty and contaminated. Only a few sugar grains are fit for consumption which did not get contaminated. Those are few in number.
What they are saying is that every sugar grain that is present on the street is fit for consumption and as anyone who isn't biased can tell, they are wrong.

Agent, in his document, has done a wonderful job at explaining this.

Due to the author's flawed perception of my argument, My point remains completely.

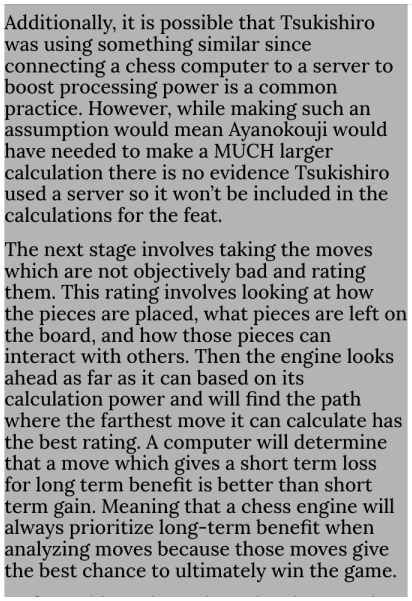
Since I have explained that the engine has a limited amount of calculation power to use the smarter the engine the better/more efficiently it can work through this process. The more moves it can discard here the more in depth on the good moves it can analyze. For example, If a computer has 50 legal moves they can make we can assume 25-30 of those moves are objectively bad. Exactly how bad would depend on each one individually but the more of these the engine can eliminate means it can look at the other 20-25 moves in more depth. If it had to analyze 50 moves it may only be able to look 10 moves ahead but with only 20 moves it can look 15-20 moves ahead. Since in both cases looking ahead would determine the bad moves and the engine would not make them. This process saves the engine time and processing power to be used on better moves. However, by eliminating objectively bad moves that doesn't mean the engine calculates fewer moves. It just means it looks deeper at better ones.

15) This part of the document is agreed upon by me as the author is stating the truth.

-

15. He agreed on this part.

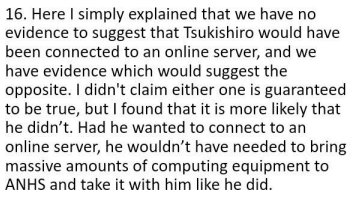
15] *My points remain as the authors haven't challenged anything.*


Additionally, it is possible that Tsukishiro was using something similar since connecting a chess computer to a server to boost processing power is a common practice. However, while making such an assumption would mean Ayanokouji would have needed to make a MUCH larger calculation there is no evidence Tsukishiro used a server so it won't be included in the calculations for the feat.

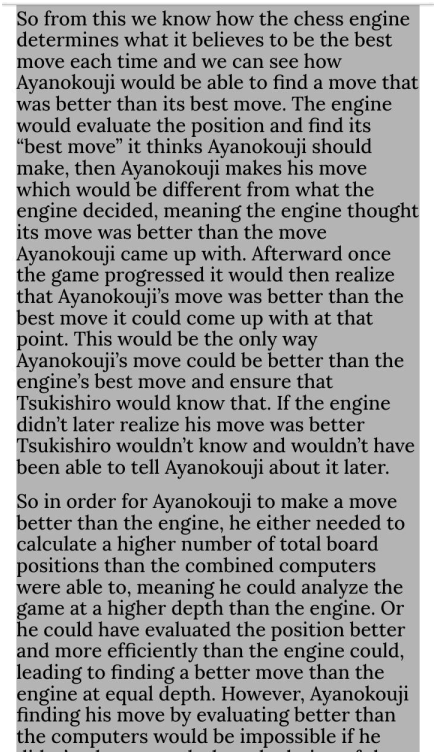
The next stage involves taking the moves which are not objectively bad and rating them. This rating involves looking at how the pieces are placed, what pieces are left on the board, and how those pieces can interact with others. Then the engine looks ahead as far as it can based on its calculation power and will find the path where the farthest move it can calculate has the best rating. A computer will determine that a move which gives a short term loss for long term benefit is better than short term gain. Meaning that a chess engine will always prioritize long-term benefit when analyzing moves because those moves give the best chance to ultimately win the game.

16) Here, in this part, the author himself doesn't consider the assumption that Tsukishiro's computers are connected to an online server, which I could still disprove. In the second paragraph, the author states some information and something related to 'rating moves'. I guess the author simply wants to say 'evaluating moves', in which case all of the above stated is true.

-


16. Here I simply explained that we have no evidence to suggest that Tsukishiro would have been connected to an online server, and we have evidence which would suggest the opposite. I didn't claim either one is guaranteed to be true, but I found that it is more likely that he didn't. Had he wanted to connect to an online server, he wouldn't have needed to bring massive amounts of computing equipment to ANHS and take it with him like he did.

16] In this part of the document, they/he has seemingly agreed with me.
'.. he wouldn't have needed to bring massive amounts of computing equipment to ANHS and take it with him like he did'.
What even is this? Where did he get this from? There is no mention of 'massive amounts of computing equipment' brought by Tsukishiro in the ANHS. It has nowhere been stated in the LN that Tsukishiro bought computers or computing devices to the ANHS. He has simply created this out of thin air. This is just an invalid statement. *My point remains*.



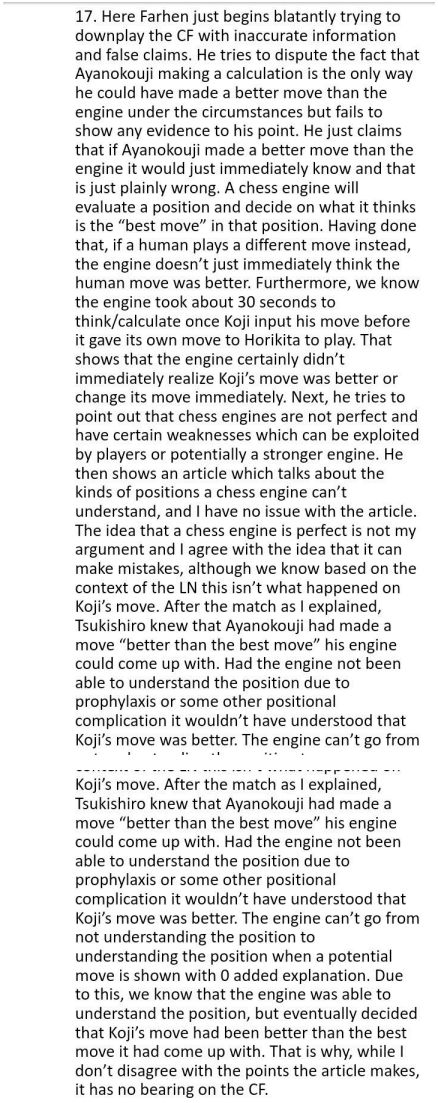
So from this we know how the chess engine determines what it believes to be the best move each time and we can see how Ayanokouji would be able to find a move that was better than its best move. The engine would evaluate the position and find its "best move" it thinks Ayanokouji should make, then Ayanokouji makes his move which would be different from what the engine decided, meaning the engine thought its move was better than the move Ayanokouji came up with. Afterward once the game progressed it would then realize that Ayanokouji's move was better than the best move it could come up with at that point. This would be the only way Ayanokouji's move could be better than the engine's best move and ensure that Tsukishiro would know that. If the engine didn't later realize his move was better Tsukishiro wouldn't know and wouldn't have been able to tell Ayanokouji about it later.

So in order for Ayanokouji to make a move better than the engine, he either needed to calculate a higher number of total board positions than the combined computers were able to, meaning he could analyze the game at a higher depth than the engine. Or he could have evaluated the position better and more efficiently than the engine could, leading to finding a better move than the engine at equal depth. However, Ayanokouji finding his move by evaluating better than the computers would be impossible if he

17) In this part of the document, the first paragraph states how Ayanokouji could have made a move better than a computer and In the second paragraph, the author proceeds to elaborate on the same topic. There are two major serious errors which I will address.
First paragraph error : The author says " This would be the only way Ayanokouji's move was better than the engine's best move and ensure Tsukishiro would know that '' after stating some statements in the First paragraph.
No, this is not the only way that Ayanokouji's move would be better than the engine's best move and Tsukishiro would know it. After simply relaying a move to the engine, it knows that this move is better than the best it could come up with, which is the case with many of the examples stated in 1). In examples stated in 1), the engines only knew the move beforehand in case they were connected to a cloud analysis that had been relayed the move in the past. In rare cases does the thing stated in the document's first paragraph happen.
Second paragraph error : The author states, "So in order for Ayanokouji to make a move better than the engine, he either needed to calculate a higher no. of total board position than the combined computers were able to Or he could have evaluated the position better and more efficiently than the engine could. " The first statement is false, as I have stated in 1) if we knew what move it was and whether the computer was able to find it or not would have made a difference. But it's not false for that reason, the reason is that chess engines are known notoriously for not being able to detect fortresses, being materialistic, not being able to detect breakthroughs, not being able to prevent prophylaxis and create a serious plan. This article mentioned below is enough to completely render the second paragraph as an error : https://www.chess.com/article/view/10-positions-chess-engines-just-dont-understand
The second statement is also a falsification because of the exact same reasons stated in the arguments for the first statement. Any human with an above average IQ can easily predict and create a contingency plan based on fortress formation, prophylaxis prevention etc. This is

also the reason why Kiyotaka making one move better than the computers doesn't even scale to above average human level intellect. Because if the move he played was just a simple move based on the above mentioned imbalances, it would be significantly easier for humans to find than engines.

-



17. Here Farhen just begins blatantly trying to downplay the CF with inaccurate information and false claims. He tries to dispute the fact that Ayanokouji making a calculation is the only way he could have made a better move than the engine under the circumstances but fails to show any evidence to his point. He just claims that if Ayanokouji made a better move than the engine it would just immediately know and that is just plainly wrong. A chess engine will evaluate a position and decide on what it thinks is the “best move” in that position. Having done that, if a human plays a different move instead, the engine doesn’t just immediately think the human move was better. Furthermore, we know the engine took about 30 seconds to think/calculate once Koji input his move before it gave its own move to Horikita to play. That shows that the engine certainly didn’t immediately realize Koji’s move was better or change its move immediately. Next, he tries to point out that chess engines are not perfect and have certain weaknesses which can be exploited by players or potentially a stronger engine. He then shows an article which talks about the kinds of positions a chess engine can’t understand, and I have no issue with the article. The idea that a chess engine is perfect is not my argument and I agree with the idea that it can make mistakes, although we know based on the context of the LN this isn’t what happened on Koji’s move. After the match as I explained, Tsukishiro knew that Ayanokouji had made a move “better than the best move” his engine could come up with. Had the engine not been able to understand the position due to prophylaxis or some other positional complication it wouldn’t have understood that Koji’s move was better. The engine can’t go from

Koji’s move. After the match as I explained, Tsukishiro knew that Ayanokouji had made a move “better than the best move” his engine could come up with. Had the engine not been able to understand the position due to prophylaxis or some other positional complication it wouldn’t have understood that Koji’s move was better. The engine can’t go from not understanding the position to understanding the position when a potential move is shown with 0 added explanation. Due to this, we know that the engine was able to understand the position, but eventually decided that Koji’s move had been better than the best move it had come up with. That is why, while I don’t disagree with the points the article makes, it has no bearing on the CF.

17] In this part of the document, they've claimed that I'm blatantly downplaying the CF with false claims and inaccurate information.

(I like how he said inaccurate information when he literally contradicted himself nine times in this rebunk shit)

Let me also say this right here,
This statement in the CF ‘So in order for Ayanokouji to make a move better than an engine, he either needed to calculate a higher number of board positions than the combined computers were able to, meaning he could analyze the game at a higher depth than the engine. Or he could have evaluated the position better and more efficiently than the engine could, leading

to finding a better move than the engine at an equal depth.' Is literal horseshit. No fucking human calculates more positions than a computer engine to outperform it. This is just complete nonsense here.

'However, Ayanokouji finding his move by evaluating better than the computers would be impossible if he didn't match the calculation.'
The fuck is this? Seriously, what the fuck is this dude saying?
Are you really so much retarded that you think someone needs to match the level of the computing power of a computer to perform better than it?
No human does this batshit that you've put forward, in every real life situation in which a human outperformed a computer engine, nobody calculates even 100 positions let alone a trillion. I've given all the examples in which a human outplays a computer (in some cases even average players are there) and nobody calculated even 100 positions let alone billion or trillion. Read this whole thing.
The reason why engines still get outperformed by humans even though they have huge computing capacity is because they don't possess 'common sense'.
This is the main difference between human play and computer play.
A human possesses 'common sense' because it only considers reasonable moves using cognition while an engine doesn't because it can't conceptualize the idea of 'candidate moves' correctly and tries its best to compensate with a huge amount of calculation capacity.
https://en.m.wikipedia.org/wiki/Candidate_move

Only 3 known engines (AlphaZero, LC0 and Hydra) are known to be Type B (candidate move finding) engines as they are the only engines who possess ingrained Neural Networks as well as reinforcement learning methods. No other engine has all of these. Stockfish doesn't have an ingrained Neural Network. The mechanisms of these engines don't apply to COTE as there's simply no mention of an engine, let alone the mechanism of the engine.

'He tries to dispute the fact that Ayanokouji making a calculation is the only way he could have come up with a better move than the engine under the circumstances but fails to show any evidence to support his point.' and elaborates...

Look at what I've stated in my document, even though it's literally above, I'll still quote my statements:
"First paragraph error : The author says 'This would be the only way Ayanokouji's move was better than the engine's best move and ensure Tsukishiro would know that' "after stating some statements in the First paragraph.
No, this is not the only way that Ayanokouji's move would be better than the engine's best move and Tsukishiro would know it. After simply relaying a move to the engine, it knows that this move is better than the best it could come up with, which is the case with many of the examples stated in 1). In examples stated in 1), the engines only knew the move beforehand in case they were connected to a cloud analysis that had been relayed the move in the past. In rare cases does the thing stated in the document's first paragraph happen.
Second paragraph error : The author states, "So in order for Ayanokouji to make a move better than the engine, he either needed to calculate a higher no. of total board position than the combined computers were able to. Or he could have evaluated the position better and more

efficiently than the engine could. " The first statement is false, as I have stated in 1) if we knew what move it was and whether the computer was able to find it or not would have made a difference. But it's not false for that reason, the reason is that chess engines are known notoriously for not being able to detect fortresses, being materialistic, not being able to detect breakthroughs, not being able to prevent prophylaxis and create a serious plan. This article mentioned below is enough to completely render the second paragraph as an error : https://www.chess.com/article/view/10-positions-chess-engines-just-dont-understand
The second statement is also a falsification because of the exact same reasons stated in the arguments for the first statement. Any human with an above average IQ can easily predict and create a contingency plan based on fortress formation, prophylaxis prevention etc. This is also the reason why Kiyotaka making one move better than the computers doesn't even scale to above average human level intellect. Because if the move he played was just a simple move based on the above-mentioned imbalances, it would be significantly easier for humans to find than engines."

See, what a horrible and shameless lie. I've clearly shown evidence as well as statements to prove my point. Now that it has come here, I'll include a whole armada of examples and points to completely thwart this lie.

https://www.chess.com/forum/view/help-support/stockfish-doesnt-find-the-winning-move
One can see, Stockfish has been also criticized for overly aggressive pruning. Previously, the engines deemed it to be a mistake, but nowadays engines simply realize that it's the best, when you play it on an analysis board. This move isn't even hard to find, any normal 1900 can easily find it. A master will surely find this move within 10 ~ 15 seconds.

https://groups.google.com/g/fishcooking/c/vLl0QVUvMQ0
One can clearly see that Stockfish didn't find a move which much weaker engines could find.

https://www.quora.com/What-examples-are-there-of-Chess-Grandmasters-finding-moves-in-a-game-that-are-better-than-the-top-moves-suggested-by-a-chess-engine
As seen here, Stockfish doesn't find the best move but after relaying it the move, , it immediately deems the position to be much better.

https://youtu.be/yGnpewUKP88?si=vEuxwTdxF977RPZU
One of the greatest games ever played, The move Qd3 is practically not considered by any engine, but when you relay it to engines, after two or three moves. They realize that it's better than what they considered.

The whole logic of 'to make a move better than a computer engine, you have to think at a greater depth than the engine' is retarded. I'll explain frankly here.
If one were to ask the players mentioned above, how did they think of such a move, they'd simply not say that 'I cAlCuLaTeD mOrE PoSiTiOnS tHaN ThE cOmPuTeR'. Because the way a human thinks and a way that a computer thinks is different. It's as simple as that. This is the main difference between human play and computer play.

A human possesses ‘common sense’ because it only considers reasonable moves using cognition while an engine doesn't because it can't conceptualize the idea of ‘candidate moves’ correctly and tries its best to compensate with a huge amount of calculation capacity.

Just take the example of Kasparov VS Deep Blue. Even though Deep Blue was able to calculate and evaluate 200 million positions per second, it still got outplayed and lost in the first match with Kasparov. Does this mean Kasparov calculated some 200 million and 1 position more than Deep Blue. Absolutely not.

In the examples provided in 1), There was the puzzle by Gijs Van Breukelen, which a computer engine couldn't see when allowed for overnight analysis.
https://en.chessbase.com/post/solution-to-a-truly-remarkable-study
https://www.google.com/search?q=grandmasters+and+engines+couldn%27tsolve&oq=grandmasters+and+engines+couldn%27tsolve&gs_lcrp=EgZjaHJvbWUyBggAEEUYOdIBCDg5MTNqMGo5qAIAsAIA&client=ms-android-xiaomi-rev1&sourceid=chrome-mobile&ie=UTF-8#

If one were to ask the gentlemen how they solved this puzzle, they'd simply not say they calculated some gazillion, septillion or quadrillion moves to find the solution. Did he/they calculate some septillion or nonillion positions, completely not, as no human thinks like that. Yeah, nothing in their analysis and annotations points to them thinking and calculating some exorbitant number of positions to solve it. Everything is taken from

The whole logic is simply just trying to make their father figure stand out like a God when what he has done is something done far more by normal humans who are not ‘masterpieces’. You have to interpret this statement by Tsukishiro ‘...even better than the best we could come up with.’ on the basis of what happens in real-life or IRL, not what you think.

‘Having done that, if a human plays a different move instead, the engine doesn't just immediately think that the human move was better.’
What the hell is this? When a human plays a different move as opposed to an engine's choice, the engine analyzes it more than it's own preferred line because it wants to give an estimation of how good or bad the ‘human’ move is (for analysis) and because the ‘human move’ was played, obviously it gives it's attention to the ‘human’ move because it's preferred line and node was pruned.

‘Furthermore we know that the engine took about 30 seconds to think/calculate once Koji input his move before it gave its move for Horikita to play. This shows that the engine certainly didn't immediately realize Koji's move was better or change it's move immediately’

Just braindead logical reasoning and retarded statements. It is such a headache to explain this to our Huntsman with 9+ years of chess fantasy experience.
Look dude, Tsukishiro said that ‘one of his moves was better than the best that we could come up with.’
That's it.
Tsukishiro said, ‘We were still forced into making an extremely difficult decision’. This tells that Tsukishiro along with his henchmen were changing the moves. Not the fucking engine.

The 30 second delay is caused by Tsukishiro and his team.
Not the fucking engine
This is also supported by the statement ‘Sakayanagi-san really did a good job at seeing through our move’ in the LN, which means Tsukishiro was responsible for this.
(Matter of fact, you think this engine had a built-in AI that could figure out how to change some moves in a game where two dudes were playing chess? Engines show lines maybe that's what you wanted to say)

This also tells us that the engine realized it immediately, since Tsukishiro and his team had to change this move, in order for the changed move to reach Horikita. How retarded are you? Nothing else has been stated in the LN about this ‘one move’ as these guys have portrayed it.

‘After the match as I explained, Tsukishiro knew that Ayanokouji had made a “move better than best move” his engine could come up with. Had the engine not been able to understand this position due to prophylaxis or some other positional complications, It wouldn't have understood that Koji's move was better. The engine can't go from not understanding a position to understanding a position just because a move is shown with 0 added explanation’ and elaborates

The fuck is this? This shows that he literally didn't understand what I'm trying to say. You simply don't possess adequate information. This whole statement is completely irrelevant.

The article says ‘Positions chess computers don't understand’. This doesn't mean that chess engines don't understand the position.
What the author meant when he wrote the title for that article is ‘Positions in which chess computers don't find the best moves'. They struggle to find the best move or good moves. My argument is that the computer engine would have struggled to find the best move when a human can do it easily. It is clearly evident in all examples provided within the article. These positions stated in the article don't cause the engine to malfunction, the engines simply don't find the best moves. The engine is incapable of finding the best moves when a human can do the same easily.
The author of the article; NM Sam Copeland has stressed on this fact in the article itself. You didn't read the whole article or did read the article and still deny it.

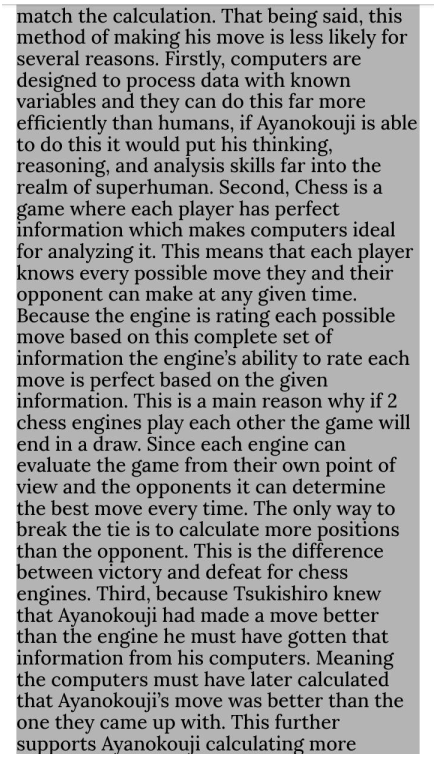
There are many more fascinating positions that baffle even the most advanced chess A.I. To demonstrate this, I've selected ten types of positions that your brain may be better able to understand than a silicon imitation. While some modern engines may be able to solve these positions with considerable time to think and a lot of powerful hardware, many of these positions will fully defy the understanding of even the best modern engines.

Many of the following positions are included in one or both of the "IQ Test" [thread, Chess.com library collection] and "The Hard TalkChess 2020 Test" [thread, Chess.com library collection] from talkchess.com, one of the most popular computer chess forums. Where available studies are sourced from Van der Heijden's Endgame Study Database, the most complete and well-referenced set of studies.

Despite the clear superiority of engines, there ARE positions which chess engines don't (and possibly can't) understand that are quite comprehensible for human players. Typically these positions showcase the human ability to think creatively and formulate plans and understand long-term factors in the position.

The author/authors didn't even fucking realize what my argument is. Obviously when an engine is shown the right moves, it would understand the position as it will be able to find the best moves from there on. This is stressed upon in my original document as well as this document. Take the example of the puzzle by Gijs van Breukelen or the TCEC match in which SF lost and you'll realize how bad their arguments are.

All of my points remain because of the author's lack of knowledge and hilariously bad attempt to 'rebunk' his claims by stating that this information is 'false' and 'inaccurate'. Obviously there are no fallacies here because of the author's nonexistent knowledge and completely horrible perception of chess terminology.


match the calculation. That being said, this method of making his move is less likely for several reasons. Firstly, computers are designed to process data with known variables and they can do this far more efficiently than humans, if Ayanokouji is able to do this it would put his thinking, reasoning, and analysis skills far into the realm of superhuman. Second, Chess is a game where each player has perfect information which makes computers ideal for analyzing it. This means that each player knows every possible move they and their opponent can make at any given time. Because the engine is rating each possible move based on this complete set of information the engine's ability to rate each move is perfect based on the given information. This is a main reason why if 2 chess engines play each other the game will end in a draw. Since each engine can evaluate the game from their own point of view and the opponents it can determine the best move every time. The only way to break the tie is to calculate more positions than the opponent. This is the difference between victory and defeat for chess engines. Third, because Tsukishiro knew that Ayanokouji had made a move better than the engine he must have gotten that information from his computers. Meaning the computers must have later calculated that Ayanokouji's move was better than the one they came up with. This further supports Ayanokouji calculating more

18) This part of the document is a part of the previously mentioned 'second paragraph'. I'll highlight the fallacies and invalid statements here as well.
Author says, "If Ayanokouji is able to do this it would put his thinking, reasoning and analysis skills far into the realm of superhuman"
As I stated in 17) and 17], and because of the same exact reasons; If Ayanokouji is able to do this, it puts his thinking, reasoning and analysis skills just on par with an above average IQ human.
Author further says, "Second, Chess is a game where each player has perfect information which makes computers ideal for analyzing it. This means that each player knows every possible move they and their opponent can make at any given time. Because the engine is rating each possible move based on this complete set of information the engine's ability to rate each move is perfect based on the given information. This is the main reason if two engines play each other, the game ends in a draw"
You have to be intellectually disabled to not be able to disprove this statement. Not even GMs have perfect information about what moves their opponents can or could make. They have excellent preparation but not perfect information. No player knows all and every possible move their opponent can make at any given time. If two engines play each other, the better engine wins, it's as simple as that. The example of the game between Stockfish and LC0 in 1) is an example, and No; to calculate more positions isn't the difference between victory and defeat for engines. Easiest example to consider is AlphaZero, which is an AI and clapped Stockfish in its era, didn't calculate more than stockfish but still won because it had a humanoid learning ability.
Author says, "Third, because Tsukishiro knew that Ayanokouji made a move better than the engine, he must have gotten that information from his computers. Meaning the computers must have later calculated that Ayanokouji's move was better than the one they came up

with. This further supports Ayanokoji calculating more positions than the engine since after that move as the engine continued to calculate in that game it would begin to evaluate Ayanokouji's position as better after a few moves due to not correctly identifying it several moves ago"
When was it said that the computers must have specifically calculated later that Ayanokouji's move was better than their consideration. In the light novel, Tsukishiro only says that the move Ayanokouji was planning to use was even better than the best move they could come up with. It could also mean the computers immediately realized that fact after Ayanokouji made the move. No proof, another assumption made by the author. This is another invalid statement on part of the author.

-



18] In this part of the document, they have seemingly also rebunked their claims and assumptions about what I completely disproved earlier, but as we know that's far from the truth.

'Here as I disproved the possibility of the engine not understanding the position, my original point about Koji's analytical and reasoning being superhuman still stands.'
Yeah nothing stands here because I completely disproved this earlier in 17) and 17].

'Then he attempts to attack the idea of a game with "perfect information" and it is clear he doesn't understand the concept' and elaborates...
His statements here do make sense, but completely not in the CF document. Look what he stated in the CF document.

"Second, Chess is a game where each player has perfect information which makes computers ideal for analyzing it. This means that each player knows every possible move they and their opponent can make at any given time. Because the engine is rating each possible move based on this complete set of information the engine's ability to rate each move is perfect based on the given information. This is the main reason if two engines play each other, the game ends in a draw"
The things he has stated in the CF document are simply just stated and not elaborated upon. In the 'rebunk' document however he has elaborated well.
My argument here automatically becomes nonexistent because of the elaboration he has provided. However this doesn't mean I'm wrong, whatever he has stated in the original CF document is completely wrong due to lack of Elaboration but whatever he has stated about 'a game with perfect information' in this 'rebunk' document is correct. He simply hasn't elaborated in the CF document and my criticism about that remains.

'As for his final point in this section, Tsukishiro's direct statement about Ayanokouji's move being better than the best move they could come up with gives us all the information we need by using simple logic.' and elaborates...
I will again explain why this logic is incorrect.
Tsukishiro said, 'We were still forced into making an extremely difficult decision'. This tells that Tsukishiro along with his henchmen were changing the moves. Not the engine.
The 30 second delay is caused by Tsukishiro and his team.
Not the engine.
This also tells us that the engine realized it immediately, since Tsukishiro and his team had to change this move, in order for the changed move to reach Horikita. These statements are directly supported by the LN as I've shown this as well in 17].

"The engine took 30 seconds to analyze this move before Horikita was given a new move to play, so the engine couldn't immediately have understood the move"
This is just completely wrong.
When Koji played his move, the engine immediately understood that it was better than its preferred line, thus Tsukishiro changed the move. The delay of 30 seconds was caused by this.
Furthermore as this isn't exactly stated how long the engine analyzed this move, thus the delay has to be considered the time for providing a new move to Horikita.
This logic is also wrong because the engine can't simply just think for 30 seconds while the delay for reaching the changed move is also 30 seconds.

All my points remain as the authors have done a pretty terrible job on 'rebunking' their claims here.

Finding his move through sheer calculation is the only one that makes sense and optimally at that, it would explain how Tsukishiro knew about how good his move was and that the engine would have figured out that Ayanokouji's move was better in hindsight.

So now that we see that Ayanokouji making a larger calculation than the engine is how he would have found his move we can also see that without making the calculation finding that move would be impossible. As mentioned earlier, the computers are discarding objectively bad moves but analyzing the rest to find the "best" move from a given position. This means that the engine would have considered the move Ayanokouji made as a possibility although ultimately making a different one. However, why did the engine choose a different move? Those reasons are the same 2 reasons from before. Either Ayanokouji evaluated the move as better based on the situation which as was already explained not a possible way his move could be "better than the engine" or he calculated more moves and realized that in the longer-term this move is better than the move the engine found. This not only proves Ayanokouji needed to calculate more positions than the computers, but that he calculated at a higher depth.

19) This part of the document is continued from the previous part. The first paragraph is wrong due to the arguments I presented in 18) and the second paragraph is completely invalidated and erroneous due to the arguments I presented in 14), 17) and 18). We'll proceed, although I don't think there is anything good to read anymore.

-

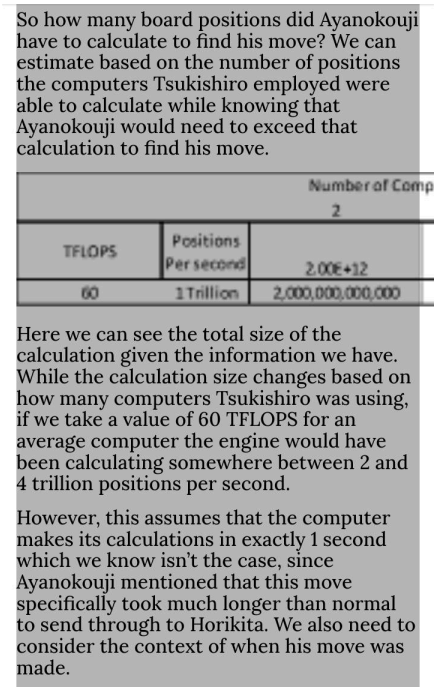
19. Here I have already explained why the invalidation of the calculation Farhen made was wrong and why the arguments are not erroneous. I showed that he needed to make a calculation to find his move and it took the engine at least 30 seconds to understand it.

19] Here, in this part of the document they have stressed upon their points being right.

I've already shown how this is completely wrong in 14), 14], 17), 17], 18) and 18]. Hence, all of my points remain however I would like to address one thing that I haven't addressed in my original Response to CF document.

'Finding his move through sheer calculation is the only one that makes sense and optimally at that, it would explain how Tsukishiro knew about how good this move was and that the engine would have figured out that Ayanokouji's move was better in hindsight'.
Horrid argument.
Finding his move through sheer calculation is the only one that would make the least sense. When he calculates over 1 trillion positions (as you have put it), does that also mean that he's considering the illegal positions as well? Does it mean he's also considering lines in illegal positions as well? Does it also mean he's calculating positions when he has no necessity as well? Keep in mind, 1 trillion positions calculated per second is the raw computing power, it isn't 1 trillion good positions just because you inserted the statement 'Because the engine and Ayanokouji would discard the same moves' which also doesn't make any sense since a human doesn't think like a computer engine.

I've already proven this in 14), 14], 17) and 17], there's no need to elaborate further. All my points remain.



So how many board positions did Ayanokouji have to calculate to find his move? We can estimate based on the number of positions the computers Tsukishiro employed were able to calculate while knowing that Ayanokouji would need to exceed that calculation to find his move.

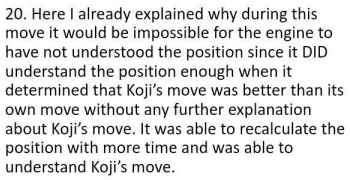
		Number of Comp 2
TFLOPS	Positions Per second	2.00E+12
60	1 Trillion	2,000,000,000,000

Here we can see the total size of the calculation given the information we have. While the calculation size changes based on how many computers Tsukishiro was using, if we take a value of 60 TFLOPS for an average computer the engine would have been calculating somewhere between 2 and 4 trillion positions per second.

However, this assumes that the computer makes its calculations in exactly 1 second which we know isn't the case, since Ayanokouji mentioned that this move specifically took much longer than normal to send through to Horikita. We also need to consider the context of when his move was made.

20) This part of the document is continued from the previous part. Here, the author states how many board positions Kiyotaka had to calculate to find this move. Again as I've stated, computers are bad at considering and viewing specific imbalanced situations like fortress draws, impossible breakthroughs, prevention of prophylaxis etc. Kiyotaka should not have to calculate billions, trillions or quadrillions of positions to outperform the computers in this context. Around five moves should have been enough for him. This is also supported by the narrative as shown later. *This part is also invalid due to the same arguments which were presented for 19).*

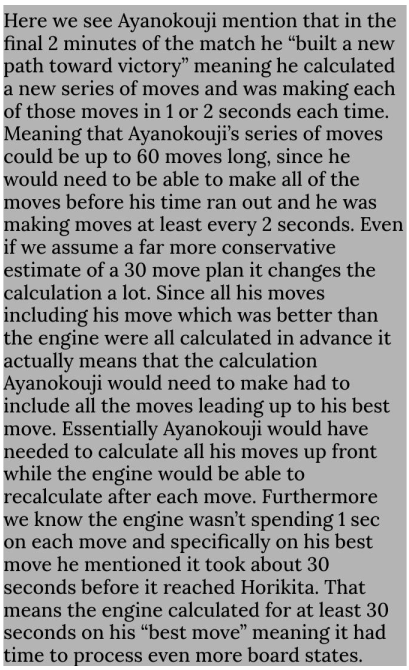
-



20. Here I already explained why during this move it would be impossible for the engine to have not understood the position since it DID understand the position enough when it determined that Koji's move was better than its own move without any further explanation about Koji's move. It was able to recalculate the position with more time and was able to understand Koji's move.

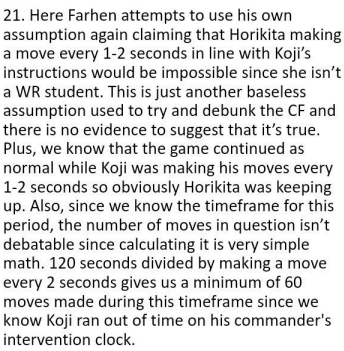
20] In this part of the document, they have again stressed on the fact that my arguments are wrong since the engine can't go from not understanding a position to understanding it.

Another bad and weak argument, I've already shown what a computer not 'understanding' a position means. It doesn't mean that the engine doesn't understand the position, it means the engine simply can't find the best moves in those positions.
All my points remain.



21)In this part of the document, also continued from the previous part, Author elaborates on why Ayanokouji's series of moves could be upto 60 moves long.
Although the 60 move calculating-ahead thing has already been falsified due to what I presented in 3) and 5), there is something interesting here. The author says "Meaning that Ayanokouji's series of moves could be upto 60 moves long, since he would need to be able to make all of the moves before the time ran out and he was making moves at least every 2 seconds".
But We know, Horikita Suzune was the one wearing the headset and hearing Kiyotaka's instructions as he made his calculations. She was the one who made the moves, not Kiyotaka. The thing is how could Suzune keep up with Kiyotaka (who is lightning fast) whilst listening to his instructions and also making moves at the same time? And we shouldn't also forget that she has very little time on the clock. The thing is she can't, if it was another WR student like Ichika Or Takuya, the story would've been different. Since Suzune is definitely a beginner, she definitely shouldn't have been able to keep up with Kiyotaka. I consider this to be a serious error in the light novel but the thing is that in the document, the author presumes that Kiyotaka calculates as well as makes the moves, which validates the statement, but this is incorrect as Horikita makes the moves. So this is an error as well as an invalid statement on part of the author as well as the narrative.

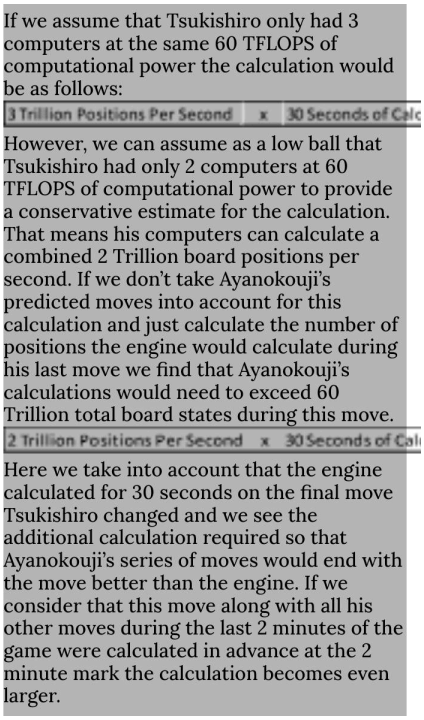
-



21] In this part of the document, they have attempted to debunk my arguments and stated that I've made assumptions to prove my point.

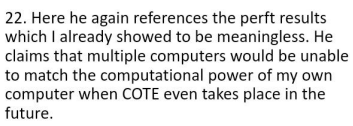
'This is just another baseless assumption used to try and debunk the CF and there's no evidence to suggest it's true'
Too bad of an argument. The author stresses the fact that this argument is wrong because there's no evidence to suggest it's true. By that logic, the whole CF is wrong and invalid since there's no evidence to prove its validity. This is a classical case of tautological fallacy where one stresses that his point is true just because he thinks it's true or that a majority of people think it's true.
That being said, I'll still explain why this argument is bad. Suzune as we know has no history of playing chess. She simply started playing chess because of the ESE and that too a week before. That being said, it wouldn't be wrong to say that she's a complete beginner and her rating shouldn't be higher than 1200 on an extremely high ball. A beginner simply can't make sense of the lines and reasoning provided by a master. It's as simple as that. She also wouldn't be able to type the notations fast as she doesn't have board viewing experience. Also, her brain wouldn't be able to deal with moves quickly because of her inexperience. All of this is why my arguments are true. She has herself agreed when Hashimoto remarked that their match seems pathetic in comparison with Arisu and Kiyo's.
Then he proceeds to elaborate but as we already know, all of this is incorrect because I've proven it earlier.

All of my points remain because of authors' commitment to fallacies such as Tautological and Ad populum, and also because of presentation of bad arguments.



22) In this part of the document, again continued from the previous part, The author states how impressive Ayanokouji's calculations are considering Tsukishiro's computers to be two or more than two desktops.
Even if Tsukishiro had five computers, then, as is evident from the Perft Results table and Stockfish 16's pruning algorithm, the depth at 30 seconds would most likely be around 16 - 20. It is important to note that even ten computers wouldn't increase the no. as much because exponentiation varies in each case. At most the depth with 10 desktops at 30 seconds would get around 30 plies. Keep in mind that an average desktop by itself is capable of computing depth around 20 ~ 25 plies with a huge amount of time but as I've stated the incorrect assumption made by the author in 14), this completely becomes an error. Realistically speaking, Tsukishiro's computers (if considered as three desktops) would have a depth of max. 25 for 1 min. and with 30 secs, their depth would be 23. That's why the statements presented are more or less invalid due to arguments presented in 17) and 18), and the previously highlighted fact. Here is another example to strengthen the claims presented in 14), 17) and 18) : https://m.youtube.com/shorts/FQjARN8eZo4
It should be realized that in this example the engine at depth 20 didn't see such a move to exploit the pin, which is pretty easy for humans to see. This kind of feat should be easy for any average master to spot within a span of one minute.

-

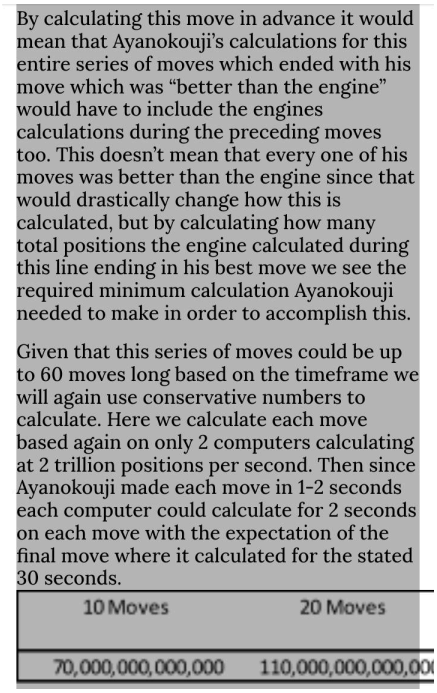


22] Here they say that referencing the Perft table is meaningless because of his previous arguments, which is completely wrong as I've also shown why the Perft Table is right in }.

‘He claims that multiple computers would be unable to match the computational power of my own computer when COTE even takes place in the future.’
Another instance of horrible reasoning and just a bad understanding of computers.
First of all, it isn't even stated how many ‘machines’ were used by Tsukishiro. Keep in mind that ‘machines’ is used to refer to things in plural. That being said, his machines could be two desktops, two laptops, two smartphones, one desktop and one laptop, three desktops or just about anything.
Also, what is this horrible argument that computers would be supporting one engine?
Are you brainfogged? How can many computers work towards one engine? What do you mean when you say their total computing capacity should reach 60 or 90 trillion moves for 3 seconds? It wasn't even stated whether these machines were working together, let alone be connected in some obscure way. These machines could be working individually which is probably the best interpretation.
Besides, this also shows that Huntsman is horrible at mathematics as well. He never accounted for the exponentiation that happens. The best example would probably be that 1 million seconds from now is about a week ago but 1 billion seconds from now is around 30 years ago.

Also, this whole argument completely contradicts the concept of Tokenization and Modulation in computer science. Every computer has it's own modulation scheme. Besides, engines are made in such a way that they are able to run on one average device. They don't need four or five computers to work efficiently. Especially since many engines also come with pre-built databases. This is not the case in COTE, since no engine is mentioned.

All of my points remain regardless of the above mentioned statements since I've already proven the Perft table to be relevant and correct. (Refer to 7})



By calculating this move in advance it would mean that Ayanokouji's calculations for this entire series of moves which ended with his move which was “better than the engine” would have to include the engines calculations during the preceding moves too. This doesn't mean that every one of his moves was better than the engine since that would drastically change how this is calculated, but by calculating how many total positions the engine calculated during this line ending in his best move we see the required minimum calculation Ayanokouji needed to make in order to accomplish this.

Given that this series of moves could be up to 60 moves long based on the timeframe we will again use conservative numbers to calculate. Here we calculate each move based again on only 2 computers calculating at 2 trillion positions per second. Then since Ayanokouji made each move in 1-2 seconds each computer could calculate for 2 seconds on each move with the expectation of the final move where it calculated for the stated 30 seconds.

10 Moves	20 Moves
70,000,000,000,000	110,000,000,000,00

23) This part of the document is again continued from the previous part, and here the Author states what would be the minimum calculation required to be made by Ayanokouji to outperform the computer. At this point, I think just saying that arguments presented in 14), 17), 18), 20) and 22) are enough to render this entire paragraph as non factual.

-

23. Same points as before, since his perft results are an invalid comparison, he did not successfully debunk the CF calculation here.

24. Here he just mentioned a summary of previous points.

23] Here they claim how my comparisons are invalid and I didn't debunk their arguments.

All of my points remain due to arguments presented in 14), 14], 17), 17], 18), 18], 20), 20] and 22].

Summary of the Engine Calculation Feat

In conclusion Ayanokouji was able to at least once make a calculation which found him a move which was better than the best move Tsukishiro's team and their computers could find. Depending on how powerful those computers are the exact size of the calculation differs but using an average computer to estimate a low ball for Tsukishiro's computers. From that, we can see the size of Ayanokouji's calculation amounts to about 1 Trillion moves per second per computer.

With only 2 computers: 2 Trillion Moves per second

With 3 computers: 3 Trillion Moves per second

Then given the fact that the computers had at least 30 seconds to calculate on the move which Tsukishiro changed, the total size of Ayanokouji's calculation would be at a minimum 60-90 Trillion board states.

Additionally, depending on the length of the series of moves Ayanokouji made leading up to that move the total size of the calculation could be far higher still. Using the conservative estimate of even 30 moves instead of a likely 90+ we see his total calculation would exceed 150 Trillion Board states.

24) In this part of the document, the Author summarizes Ayanokouji's Engine Calculation Feat.
The arguments presented in 14) and 17) invalidate the claim about Kiyotaka calculating more positions than the computer.
The arguments presented in 18) further contribute to the invalidation of this feat.
The arguments presented in 20) support the claim that Ayanokouji has no need to calculate trillions of positions and the author seems to mistake 'moves' for 'positions' (I just realized that now)

-

23. Same points as before, since his perft results are an invalid comparison, he did not successfully debunk the CF calculation here.

24. Here he just mentioned a summary of previous points.

24] Here they say that this is a repeat of previous points.

All my points remain because of arguments presented in 23].

WR Chess Statements

As a child, I learned how to play chess in the W

I had played against a great number of so-called

was better than all of them.

In the infamous environment known as the White Room, Ayanokoji received his training on his chess ability through the hired professionals the WR institution searched for in large numbers for the instruction of every child to a proper degree.
Ayanokoji states that he had played against a multitude of professionals as a child, and that in comparison, Sakayanagi was better than each one of them.
Despite having not played Chess anytime within the last year and a half since leaving the White Room, Ayanokoji was able to match and prove superior to Arisu, this implies that he is at a level incomparable to the Professionals he used to face as a child, as even if he only maintained himself at his WR skill level, he was still able to beat someone superior to all of his instructors.

25) In this part of the document, the author has put some WR chess statements to be considered.
In the first paragraph, the author states that Kiyotaka received chess training from chess professionals.
In the second paragraph, the author states that Kiyotaka played against a multitude of chess professionals and concluded that Sakayanagi was better than all of them.
In the third paragraph, the author stated that Kiyotaka played Sakayanagi and was still able to match her level even though not playing for a year and a half. Everything in this part of the document is relevant, valid and true. So, everything is agreed upon by me.

-

25. Here he mentioned the WR statements about Koji's chess training and didn't revise his earlier claim about Koji's rating. How would he manage to be unbeaten vs WR chess instructors for which at least some of them would be GM level and his rating be 2200? Furthermore, how could Arisu be better than all of them and her rating only be 2000? It's because Farhen made wild assumptions about Koji's chess skills without taking any of the appropriate context into account.

25] In this part of the document, they criticize me for not revising my claims.

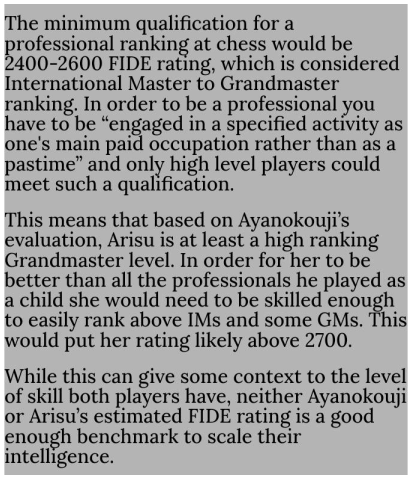
(I've already proven why the statements which have no validation need to be discarded, I won't elaborate about that here)

‘How would he manage to be unbeaten vs WR chess instructors for which at least some of them and her rating be 2200? Furthermore, how could Arisu be better than all of them and her rating only be 2000?‘ and elaborates
This shows that either my dude Huntsman knows nothing about chess or is really trying hard but failing to prove his point. Here's a list of why his arguments are wrong :

- I said that 2000 and 2200 were their rating estimates for that game. This means that in that game, both players showed a rating performance of 2000 and 2200 respectively. That wouldn't be right considering I literally took the average of players in japan but considering the statements I provided in that context, everything is true. Arisu not being able to get out of a mating net when she could do so is simply evocative of this fact. I've also elaborated on this as well. This also doesn't mean that their ratings are exactly 2000 and 2200, both are an estimate/approximate.
- Already elaborated on why no WR instructor would be a GM but I'll still explain regardless. There are no GMs in Japan currently. Also there are no ‘real’ IMs in Japan as well. There were two IMs in Japan. One IM is ethnically Vietnamese who changed his federation in recent years and another has retired. A counter argument given here is that Hikaru has also changed his federation. This is not the case here, because Hikaru has spent his entire lifetime being associated with the American flag while as the gentleman Thanh Thu Tran was originally from Vietnam and changed his federation due to personal preferences. This case counts as special.
- There's a golden rule in chess that defeating a master once doesn't make you a master. There's also the fact that making a move better than a computer doesn't make you better than the computer. It's as simple as it gets.
- There's no specific mention of the playing strengths of the professionals that Koji Or Arisu played in the WR. As we already know, there are no GMs and no real IMs in Japan. The best rating they could play against would have been around 2100 (averaged, not considering retired IMs and non-ethnic Japanese). Thus, it's not a big difference between my actual estimate.
- Arisu being considerably superior to the professionals she played against is a completely abstract statement. It doesn't give us an insight into how she was superior. Whether it was positional understanding, tactical combinations, aggressiveness, subtle play, endgame techniques etc. All of these things aren't addressed by this statement. This statement also doesn't tell us why she was superior. Whether it was her quick play, planning, strategic inference, sacrifices etc. None of this is also addressed. There is also no mention of her understanding in the three different phases of a chess game. Besides, statements have to be discarded unless they are complemented by feats. Even by statements scaling, this feat doesn't get us anywhere because of its ambiguity.
- None of WR instructors would be GMs or IMs as already shown. Nonetheless refer to } for extra arguments.
- It was never stated whether Koji played or studied chess seriously. He also gave up on chess a long time ago.
- Statements have to be disregarded nonetheless. There's no point in scaling a feat when you bring up statements and narrative. Scaling the narrative is simply irrelevant

when you bring up a feat.We are scaling only on the basis of what is provided in Y1 V11. Only feats with complimentary statements are considered. WR statements are not only ambiguous and abstract but also very badly explained.

All my points remain because of the authors' ineptness and bad understanding.



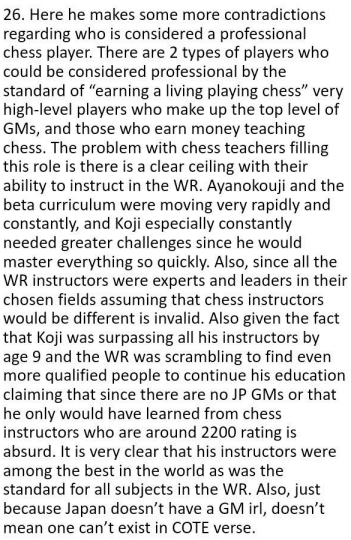
The minimum qualification for a professional ranking at chess would be 2400-2600 FIDE rating, which is considered International Master to Grandmaster ranking. In order to be a professional you have to be “engaged in a specified activity as one's main paid occupation rather than as a pastime” and only high level players could meet such a qualification.

This means that based on Ayanokouji’s evaluation, Arisu is at least a high ranking Grandmaster level. In order for her to be better than all the professionals he played as a child she would need to be skilled enough to easily rank above IMs and some GMs. This would put her rating likely above 2700.

While this can give some context to the level of skill both players have, neither Ayanokouji or Arisu’s estimated FIDE rating is a good enough benchmark to scale their intelligence.

26) This part of the document is continued from the previous part and here is where the errors start.
In the first paragraph, the author states that "minimum qualification for a professional ranking at chess would be 2400 - 2600 FIDE rating. "
No, there is no minimum qualification of rating for a professional chess player. As the author himself states, you have to be engaged in a specified activity as one's main paid occupation. This doesn't mean there is a specific rating stereotype for chess to be someone's main paid occupation. If you're lower rated, but still win enough money to support your livelihood, you're a professional. If you're not even earning enough but consider chess to be your main occupation, you're a professional. Anybody rated > 2200 can be officially considered a professional since that's where FIDE starts giving out titles. You become officially recognized as a chess player after you cross the rating threshold of 2200. Author's statement is wrong.
Considering the fact that there are no GMs in Japan as many serious players are hooked to Shogi, and only two IMs, the average rating of the professionals that Kiyotaka and Arisu played could've very well been around 2050 - 2100 max.
In the second paragraph, Author states that "Arisu is at least a high ranking grandmaster" and proceeds to elaborate.
As I proved in 9), Arisu performed as a WCM with a FIDE rating of 2000 which is nowhere even remotely close near GM level and Kiyotaka performed as an FM with a FIDE rating of 2200.
In the third paragraph, Author states that Kiyotaka and Arisu's chess ratings are not good enough benchmarks to scale their FSIQ. I can definitely agree since their estimated ELOs are not very high. Still, super GMs are known to have very good PSI, PRI, VSI, NVI, GAI and CPI.

-



26] In this part of the document, they have stated why I made contradictions regarding who is a professional in chess standards (as we all know the arguments don't get better)

‘There are two types of players who are considered professional by the standard of “earning a living playing chess” very high-level players who make up the top level of GMs, and those who earn money teaching chess’
This shows completely that authors don't know what they are talking about.
This whole logic and reasoning is completely flawed. There are two types? What about people who write chess books?
What about professionals who give coaching classes?
What about professionals who are staff in big chess websites like chess.com and lichess.org?
What about professionals who commentate on games?
What about professionals who have YouTube income?
What about professionals who are affiliated with third parties?
What about professionals who have contracts with sports and other companies as advertisements?
What about professionals who have online courses?
What about professionals who hustle?
What about professionals who are prominent figures and are given money simply for attending tournaments.
This logic is completely flawed and No, not all of these ‘teach’ about chess. Half teach, others play and get a living by competing in tournaments.

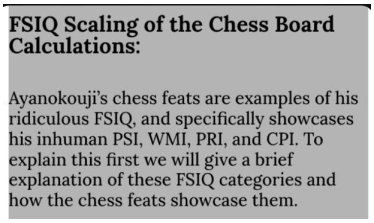
‘The problem with chess teachers filling their role is there is a clear ceiling with their ability to instruct in the WR’ and elaborates...
Again this is just an attempt to bring in narrative to prove your point. There's a clear ceiling for someone being a professional for them to be appointed as a teacher in WR. As FIDE puts it, one with a title is regarded as a professional. There's no other reason to simply bring in super GMs and IMs when anybody with a title is regarded as a professional, even that is also not stated. Besides, WR is affiliated with a political party, not an international organization. Also

bringing up the narrative is simply not right as it has nothing to do with the feat. We have to analyze this ‘feat’ in itself and not in the context of the narrative.

‘Also since all the WR instructors were experts and leaders in their chosen fields, assuming that chess instructors would be different is invalid’
Simple case of cause and effect or correlation-causation fallacy. When the narrative hasn't given us a proper statement, making sense of it on the basis of what is common for the rest is wrong. You cannot make complete sense of an abstract statement. There's no evidence to suggest that these professionals were necessarily the best of their fields. There's also no proof that they were the best of their fields. An argument given here is that WR had a lot of expenses and they hired the best teachers, which again doesn't provide us with proof. Yes, they’d certainly have the best of their own country but not of the whole world as it's simply not stated. Statements have to be discarded one way or another. That's why, I resorted to FIDE's inclination and interpretation of a ‘professional’ as it makes the most sense. This argument is wrong because of a simple cause and effect fallacy.

‘Also, just because Japan doesn't have a GM irl doesn't mean one can't exist in COTE verse.’
Another attempt to solidify your ‘built on sand’ arguments. When it was a matter of comparing computers and engines, we were correlating it to real life. Now that we have reached here, are we making our own reality? That's not how this works. Japan doesn't have a GM or a proper IM right now, you have to base your claims on that. Not what you think.

All of my points remain because of the authors' lack of understanding and lack of concrete information in the narrative as well as commitment of fallacies like Ad Populum and Correlation-Causation.


FSIQ Scaling of the Chess Board Calculations:

Ayanokouji’s chess feats are examples of his ridiculous FSIQ, and specifically showcases his inhuman PSI, WMI, PRI, and CPI. To explain this first we will give a brief explanation of these FSIQ categories and how the chess feats showcase them.

27) In this part of the document, the author scales the chess feats of Kiyotaka in terms of PSI, WMI, PRI, CPI.
After my document, this is what results should be, considering all invalid/erroneous statements in the narrative as well as the document to be not considered; If we consider the erroneous statements, then all of these indexes would drop considerably.
• PSI : No Change, exactly as Kiyotaka's PSI before the CF document.
• WMI : No Change or Slightly Below than before the CF document.
• PRI : Somewhat - Slightly Below than before the CF document.
• CPI : Slightly - Moderately Lower than before the CF document.
Δ Overall FSIQ : Lower than before the CF document.
I've also looked at the misconceptions part of the original document but deemed that irrelevant to our topic.

-

27. So, in conclusion, I have shown why each of the debunk points in the Farhen doc is either wrong, invalid, or relying on false assumptions to try and debunk the CF doc. Based on that I could say there are 27 invalid/erroneous statements in his doc which make the whole thing invalid as a debunk attempt. There were multiple serious errors which completely invalidated his points they support, and there were many blatant assumptions used to try and disprove the original doc which have all been addressed. These are the reasons why I don't find any part of the Farhen007 CF debunk to be valid and why after reading it I don't consider it to have changed anything about my stance on the CF.

27] In this part of the document, they have stated how they haven't and why they haven't changed their stance on this 'CF'.

As a matter of truth, even if all of his arguments were flawed, no one would admit defeat himself/herself.

This 'rebunk' document has completely failed in rebunking the CF. The CF is simply an armada of assumptions. I've been completely successful in debunking it. I'm not going to stop here, I'll include everything relevant to cease this fantasy right here.

Debunk of DAX PMFT's recent most response

(I won't quote everything as it will unnecessarily make this document lengthy)

Let's start with your perft table argument which as I have said is completely meaningless. You showed a table which, as I told you, is used as a debugging tool for programmers who are coding chess engines. It allows them to see at a glance if their algorithms and generators are functioning successfully. The issue of using it to make the case that the COTE engine can only calculate positions equal to it is that isn't what a perft table is for. Any high-level engine can WAY out calculate the perft table results, since the perft table doesn't represent the benchmark for the number of positions an engine is capable of calculating. For that reason, your entire argument based on it is invalid, because you made the claim that the perft table represents the real number of positions/depth an engine is calculating. There were 2 other issues with that argument. First was what I showed you in my last response showing that the perft table is not a valid source for the capabilities of engines. My PC can calculate WAY higher depth than the perft table says it should be able to. Table says 30 seconds of calculations = depth 18, my PC could calculate depth 32 in 3-5 seconds. The other thing is that the level of the hardware isn't taken into account by the table. If I used an old 2007 laptop and ran a modern engine, would that be able to beat the same engine running on my modern PC? Of course not, the additional computational power will allow the modern PC to win. The perft table doesn't account for any of that and given COTE's timeline (which I will expand on later) it is even more out of date.

1-) In this part of the document, they have elaborated on why the Perft table argument is completely meaningless. As we all know; they know nothing, this is completely wrong. I'll explain in detail here.

Pathetic argument. There's no point in bringing up the fact that Perft is a debugging function. The argument is about Perft results, not about Perft function. Do not be confused grown up brats. However, since you don't understand a single thing, I'll elaborate in greater detail further.

What's this ‘It allows them to see at a glance if their algorithms and generators are functioning successfully’. You shouldn't have included this statement as it completely revealed your lack of knowledge about the subject. Chess engine developers don't look at the table to confirm whether their algorithms and coding are correct. They input the Perft function into their engines’ command line interpreters to make sure everything is right.

Perft results give the relationship between raw computing power and depth reached on a specific basis with exact conditions. It forces the move generation tree of strictly legal moves to count all nodes at a certain depth which can be compared to predetermined values and used to isolate bugs.
What does that exactly mean?
In simple words, the Perft function causes a move generation tree of only legal moves to count all moves (legal as well as illegal) at a certain depth.
This gives us the direct correlation between a computer's raw computing power and the true depth it can reach. True depth here means that it calculates all possibilities. It doesn't mean the function calculates all those positions, it means it counts all those positions. However, if a position is deemed as a considerable good position for further analysis, engines calculate and evaluate that position. Why is that important? Because if an engine doesn't do this, its preferences of first moves as White as well as Black and opening lines and variations will never change. Thus, engines that are allowed to learn through reinforcement learning, machine learning or AI brute force their opening moves.
This however is not the case with most engines nowadays as they simply use AB pruning. Even though they have built-in opening databases, they are allowed to brute force still. Not to mention, they also have endgame tablebases. However, this also doesn't apply to COTE as there's no mention of any engine whatsoever. The Perft table is relevant for these as well as other major reasons which are stated in the miscellaneous statements debunk section.

Since nothing is stated about these ‘machines’, assuming them to be desktop computers with great computing powers is simply wrong.

What is with this ‘Any high-level engine can WAY out calculate the Perft table results, since it doesn't represent the benchmark of positions an engine can calculate’ argument?

This completely doesn't make any sense. What is the meaning behind saying any High level engine can WAY out calculate the Perft table results? No engine can do that and does that, because no engine has the necessity to do it and Perft Results represent the total number of positions in all nodes with legal and illegal circumstances. It provides a direct reference tool to

find whether your programmed engine’s move generator is working as per the requirements. Also no engine calculates all moves and plies in a game. Since any engine can be allowed to run for an unlimited amount of time and it will keep on calculating plies until the computer crashes. I assume you meant to say ‘benchmark of positions a computer can calculate’, which by the way still doesn't make any sense as a computer will keep on calculating positions and lines until it runs out of memory. The computing power's benchmark is maybe what you actually meant to say and I've already addressed that completely and proven it to be invalid.

The issue with your PC out calculating and outperforming the COTE engine is simply that we don't know the details about the ‘machines’. The probability of Tsukshiro using desktop computers with huge computing power and best engines installed with engines updated to their latest versions is closer to 0% then me dying of a heart attack and it is simply an assumption.

Now going onto your ‘the other thing is that the level of hardware isn't taken into account by the table’.

Crazy argument, to be frankly honest. You simply just said that Perft is a debugging function. Perft results (the table of Perft results) are simply based on the Perft function. Whichever computer you input this function into, will be able to calculate the Perft results, be it fast or slow based on your hardware capabilities.

The other argument you had was ‘If I used an old 2007 PC, and ran a modern engine, would that be able to beat the same engine running on my modern PC, of course not'. First of all, this argument doesn't even have a basic core to begin with, you're answering an argument with a question that doesn't even address the main point. That being said, let me elaborate on why you're hopelessly wrong. First of all, engines nowadays aren't calculating by means of Brute Force mechanism. That has long gone by, with the fall of Deep Blue. If you have an old computer, the same engine would calculate the same way it would on a modern PC. The only difference here is that the modern engine would do it efficiently, and that's all. The additional computational power does almost nothing for the engine since most of the engine’s strength is in it's code. Here's a relative proof of what addresses my arguments with relation to AlphaZero's criticism:

DeepMind addressed many of the criticisms in their final version of the paper, published in December 2018 in *Science*.[4] They further clarified that AlphaZero was not running on a supercomputer; it was trained using 5,000 tensor processing units (TPUs), but only ran on four TPUs and a 44-core CPU in its matches.[20]

Chess

In the final results, Stockfish version 8 ran under the same conditions as in the TCEC superfinal: 44 CPU cores, Syzygy endgame tablebases, and a 32GB hash size. Instead of a fixed time control of one move per minute, both engines were given 3 hours plus 15 seconds per move to finish the game. In a 1000-game match, AlphaZero won with a score of 155 wins, 6 losses, and 839 draws. DeepMind also played a series of games using the TCEC opening positions; AlphaZero also won convincingly. Stockfish needed 10-to-1 time odds to match AlphaZero.[21]

The engine on modern PCs wouldn't just win due to its additional computational power. In fact engines nowadays are made such that they are able to work on any low-end device, even smartphones from four to five years ago are capable of running today's engines. It would not just lose and the outcome isn't as disadvantaged for the engine running on the lower-end PC. Engines nowadays aren't based on brute force computations, that's why your argument is hopelessly bad. Another reason is that an engine doesn't use the 'additional computational power' unless it is configured to. An engine running on a modern PC on depth 6 would do it the same way and same speed as an engine running on an ancient PC on depth 6. The difference is shown when both are asked to calculate at extravagant depths like 14+. That argument is half correct and half-incorrect in all contexts but that has nothing to do with COTE as I've explained below as well.

Also, the hardware argument that you have isn't good either. Perft came formally came into existence in 2003 when the first ever Perft of the initial position was calculated by Albert Bertilsson who started a distributed project to calculate Perft of the original position.

History

Supposably, perft was first implemented within the Cobol program RSCE-1 by R.C. Smith, submitted to the USCF for evaluation, and subject of an 1978 Computerworld article [1] . RSCE-1's purpose was not to play chess games, but position analysis, to find forced mates, and to perform a move path enumeration of up to three plies, with the perft(3) result of 8,902 from the initial position already mentioned [2]. Ken Thompson may have calculated perft(3) and perft(4) earlier than this date with Belle. Steven Edwards suggested the move path enumeration in 1995 as implemented in Spector [3] and has since been actively involved in Perft computations, while the term "Perft" was likely coined by a Crafty command, despite its initial implementation was not conform to the above definition [4].

In **December 2003**, Albert Bertilsson started a distributed project [5] to calculate perft(11) of the initial position, taking over a week to calculate [6] . Exact Perft numbers have been computed and verified up to a depth of 13 by Edwards and are now available in the On-Line Encyclopedia of Integer Sequences [7] , and are given under Initial Position Summary. A so far unverified claim for perft(**14**) of 61,885,021,521,585,529,237 was given by Peter Österlund in **April 2013** [8], while Daniel Shawul proposed Perft estimation applying Monte carlo

In **December 2003**, Albert Bertilsson started a distributed project [5] to calculate perft(11) of the initial position, taking over a week to calculate [6] . Exact Perft numbers have been computed and verified up to a depth of 13 by Edwards and are now available in the On-Line Encyclopedia of Integer Sequences [7] , and are given under Initial Position Summary. A so far unverified claim for perft(**14**) of 61,885,021,521,585,529,237 was given by Peter Österlund in **April 2013** [8], while Daniel Shawul proposed Perft estimation applying Monte carlo methods [9] [10]. In **August 2017**, Ankan Banerjee, who already confirmed Peter Österlund's perft(**14**) in September 2016 [11], computed perft(**15**) of 2,015,099,950,053,364,471,960 with his GPU perft program [12], running it several days two times with different zobrist keys on a cluster of Nvidia DGX-1 server systems [13]. His program starts exploring the tree in depth first manner on CPU. When a certain depth is reached a GPU function (kernel) is launched to compute perft of the subtree in breadth first manner [14]. Ankan Banerjee dedicated his computations in honor to Steven Edwards - whose tireless efforts for verifying perft(14) encouraged him to verify perft(14) and take up the challenge to compute perft(15) [15].

While that did take a week to calculate, it was the case in 2003.
That being said there are many Perft results calculated from there on. Considering the fact that when the alleged CF takes place, your claim of the timeline is around 2032 (as you have tried to prove). We (Agent and I) think that the feat has taken place around 2020. In both

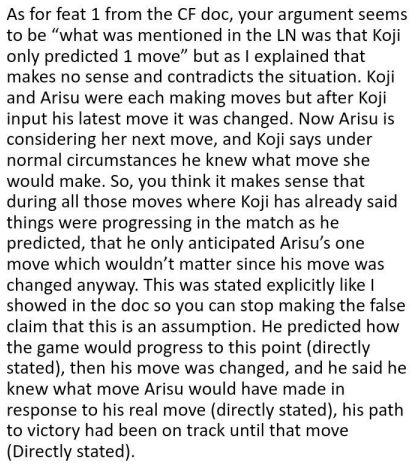
cases one can definitely be sure that the hardware for Perft results being true is definitely sufficient for desktops, even in the COTE timeline. But there are no mentions of ‘desktops’ specifically and ambiguous words like ‘machines’ are used. Your arguments are nullified completely.
Another of your arguments went something like :
‘The Perft table doesn't account for any of that and given COTE's timeline (which I will expand on later) it is even more out of date’.
You really have ran out of arguments, haven't you? The Perft table isn't relevant in itself, I have deduced the pruning algorithm of Tsukshiro's machines from Stockfish 16’s pruning algorithm, which you haven't even said one thing about. (Well, you couldn't say anything about it)
The Perft table is taken with relevance to SF16's pruning algorithm to give an estimate of what Tsukshiro's computers are capable of computing; considering if his ‘machines’ followed the mechanism of pruning. The Perft table isn't much irrelevant or relevant in itself, but with SF's algorithm shown, it automatically becomes a concrete argument. There's no need for you to attack the Perft table + SF16 pruning algorithm composite argument, since that's taken from your assumptions regarding Tsukishiro’s ‘machines’ in which there have been no mentions of engines.
Having said that, what was this retarded argument that you presented:
‘and given COTE's timeline (which I will expand on later) it is even more out of date’
Even if COTE's timeline takes place in the future, it only boosts the relevance of the Perft results. It doesn't make it more out of date. This is like saying that Call of Duty, Halo, Legend of Zelda, or other old GTA games wouldn't run on a modern PC. This argument is deadass horrible, like please revise your arguments before posting them.

I have said this many times before and this is the stupidest argument in all of SCD if I’m being honest. NO, the author doesn’t have to be a chess master to write about a high-level chess game. By your logic the chess match in NGNL V1 is debunked since that author isn’t a GM. All of L’s Detective Skill is debunked since Ohba isn’t a real detective, etc. The author can write about things they aren’t a master of irl. This argument is so stupid I’m not even going to respond to anything else regarding it. You are just delusional if you think an argument like this holds any merit.

2-) In this part of the document, they say that this is the stupidest argument they've come across.

Simple case of Quick Generalization. At least they should have read what I said in my document.
I have no problem with the author being a master or a genius in the field. The thing is he hasn't explained the alleged feat well. The whole match in Y1V11 is filled with abstract statements and non credible information. The game isn't well explained either. The chess game in V1 of NGNL is not even real standard chess. Its a game of chess in which your piece doesn't move even if you instruct it to. That's something the author has come up with. Thats not real chess, so obviously it doesn't need explanation. L's detective skill isn't debunked because the author has explained it pretty well. Obviously when there are good explanations, nothing is to be challenged there. You don't seem to realize what the substance of my

argument is. There's nothing wrong with the feat if everything was explained well. A simple example is the novel ‘The Queen's Gambit’ by Walter Tewis. The games are well explained and everything related to chess is spot on.
My point remains completely because neither the game nor the feat is well explained.


As for feat 1 from the CF doc, your argument seems to be “what was mentioned in the LN was that Koji only predicted 1 move” but as I explained that makes no sense and contradicts the situation. Koji and Arisu were each making moves but after Koji input his latest move it was changed. Now Arisu is considering her next move, and Koji says under normal circumstances he knew what move she would make. So, you think it makes sense that during all those moves where Koji has already said things were progressing in the match as he predicted, that he only anticipated Arisu’s one move which wouldn’t matter since his move was changed anyway. This was stated explicitly like I showed in the doc so you can stop making the false claim that this is an assumption. He predicted how the game would progress to this point (directly stated), then his move was changed, and he said he knew what move Arisu would have made in response to his real move (directly stated), his path to victory had been on track until that move (Directly stated).

3-) In this part of the document, the say that the first feat in their CF document is completely valid.

I have already explained all the major points and why your interpretation of this ‘feat’ is completely wrong. Nonetheless, your argument about ‘Koji making one move prediction doesn't make any sense’ is completely wrong due to your wrong interpretation of the timeline. Tsukishiro had not intervened when Koji was doing this. Tsukishiro intervened afterwards. Besides, your argument is still completely wrong because even if Tsukishiro had intervened as you say (which is wrong), it still makes complete sense for him to make move-by-move predictions since that's what is stated in the LN. You thinking that this doesn't make any sense and is wrong doesn't make it wrong. Your arguments about that are that since Tsukishiro intervened, it wouldn't make sense as Koji’s move was changed. This again doesn't make any sense because Koji wasn't predicting the game's moves from the beginning, and it is nowhere stated. Everything here is still valid.

As for your final arguments here, which I'll address momentarily, go something like :
‘He predicted how the game would progress to his point (directly stated), then his move was changed, and he knew what move Arisu would have made in response to his real move (directly stated), his path to victory had been on track until that move (directly stated)’

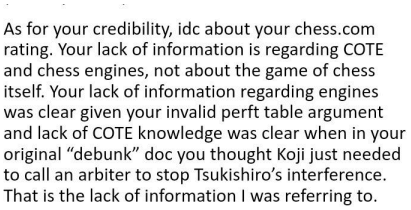
Massive assumptions, and I'll explain everything with fine details.
First of all, he didn't predict how the game would progress to his point. That's a massive assumption. In the LN, he said ‘now I had to build a new path, one that would lead me to victory’. So he's saying that he had to build a new path towards victory. See how he hasn't said anything about him predicting the moves and the game being within all of his calculations. It's simple logic, take a sport that isn't chess like Soccer Or Basketball. If a team wins, does that mean they knew everything their opponents would do. Obviously not. This same logic

applies here. If he had stated something like ‘this was all part of my plan’, ‘I knew all of this’ and/or ‘I had already foreseen this’, this logic wouldn't apply as he directly stated that he predicted the game upto that point. But he has not done anything like that in the narrative, I've included it in my original document as well but they simply just didn't address this. My point is completely correct.

Second, the argument ‘then his move was changed, and he knew what move Arisu would have made in response to his real move (directly stated)’ is simply you forgetting that these events aren't interlinked and your perception of the timeline is wrong. This doesn't need much addressing, what you've stated is wrong because he didn't do what you think and I've already addressed that many times before which is ‘Under more normal circumstances, I already knew what move she would make next’ and Tsukishiro intervened afterwards, not when he said this. There's a huge difference of time between these two events. My point is again correct.

Third, this argument ‘his path to victory had been on track until that move (directly stated)’ is simply just you trying to imply that you don't understand the narrative with context. What you have said is what he said, but this doesn't tell us that he predicted her moves to his victory. What he stated in the narrative was ‘then I had to build a new path, one that would lead me to victory’ and ‘the endgame was approaching. The result would be declared soon’. As one can see, he never implied that he predicted all of her moves to his victory because nobody does that and I've already explained that a million times now. You only predict the reasonable responses. Not everything that will happen in the game.

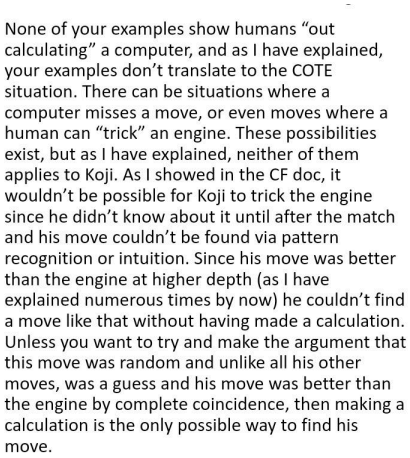
Nothing is directly and explicitly stated except the statement ‘Under more normal circumstances, I already knew what move she would make next’. Everything else you have claimed to be ‘directly stated’ is not stated directly and explicitly. You're making assumptions to prove your point and they are completely false.


As for your credibility, idc about your chess.com rating. Your lack of information is regarding COTE and chess engines, not about the game of chess itself. Your lack of information regarding engines was clear given your invalid perft table argument and lack of COTE knowledge was clear when in your original “debunk” doc you thought Koji just needed to call an arbiter to stop Tsukishiro’s interference. That is the lack of information I was referring to.

4-) In this part of the document, they say that my information and knowledge about COTE and Chess engines isn't credible.

I've already stated why none of this makes sense. Since Koji's going to lose anyway due to interference, there's no point in him playing. I've also said this before but let me say this once again. He didn't know that Tsukishiro would intervene with his moves when he took over Horikita, however when Tsukishiro intervened first, he immediately realized that somebody is changing the moves (this is stated by him in ‘I had to wipe my slate clean, and then I had to build a new path. One that would lead me to victory’). It is clear he realized that someone changed his move at that point. The Perft table in itself isn't very relevant but I've also given SF16's pruning algorithm (which is one of the best case scenarios for COTE's engines) and

used that to deduce Tsukishiro's ‘machines’ depth. I've already addressed all of this in greater detail. For more Perft results table arguments, refer to 2}. Now, as for my credibility, I can put forward my proof of identity. What do you have to put forward for your ‘9+ years of experience’? Well, as we can see, absolutely nothing.


None of your examples show humans “out calculating” a computer, and as I have explained, your examples don’t translate to the COTE situation. There can be situations where a computer misses a move, or even moves where a human can “trick” an engine. These possibilities exist, but as I have explained, neither of them applies to Koji. As I showed in the CF doc, it wouldn’t be possible for Koji to trick the engine since he didn’t know about it until after the match and his move couldn’t be found via pattern recognition or intuition. Since his move was better than the engine at higher depth (as I have explained numerous times by now) he couldn’t find a move like that without having made a calculation. Unless you want to try and make the argument that this move was random and unlike all his other moves, was a guess and his move was better than the engine by complete coincidence, then making a calculation is the only possible way to find his move.

5-) In this part of the document, they say why the real-life examples don't translate to COTE.

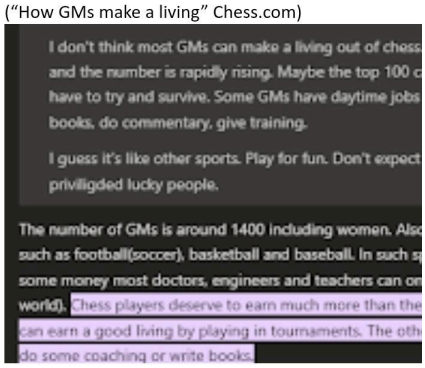
None of the real life examples show humans out-calculating computers? Well yeah, because no fucking human thinks like a computer. A human has common sense to derive and base it's moves upon. A computer doesn't have common sense and knowledge. All it's capable of is to make sense of electric signals received and it does that insanely fast. A human can definitely not ‘out calculate’ a computer but a human is definitely capable of evaluating a position far better than computers. This is the reason why humans outperform computers. They don't calculate more than the computer. They simply have better analysis skills than engines and that's what engines lack at. Due to this, they have outperformed the engines of their times. I've shown that no human calculates more positions than the computer with several examples. Throughout this document, I've also shown why the 1 trillion moves per second argument is horribly flawed and bad. You're arguments are terribly bad because you think that to outperform a computer, one needs to calculate more than the computer. Still if you're unsatisfied, refer to 1} where there's a comprehensive debunk of that statement. It is also supported by the narrative of the LN itself.
Besides, what is this ‘trick an engine’ or ‘computer misses a move’ argument?
‘It wouldn't be possible for Koji to trick the engine since he didn't know about it until after the match and his move couldn't be found via pattern recognition or intuition’
What the fuck?
Koji is playing against Arisu, not a fucking engine. He is playing to win against Arisu, not to win against the engine. He is playing against Arisu to win, not to trick some fucking engine. Matter of fact, as you later say in this argument that ‘they did not know about the engine’, this only strengthens my argument and weakens your own. What was the point of you bringing this up? You have literally shoved an axe on yourself. Then you tried to say that the engine was running on a higher depth (which by the way is another one of your naked assumptions and I've shown why in this document). I've already shown that engines miss moves even at depths

like 60 with overnight analysis in my original document. Thus, the engine running on a higher depth hardly makes a difference here.

You've also included an argument which goes something like ‘he couldn't find a move without calculation’. Obviously he needs to calculate to find such a move, but not some gazillion or bazillion moves as you've put forward. Besides, for the comprehensive debunk of 1 trillion moves, refer to 1}. The last argument you've put forward should likely be sarcasm as you clearly don't understand what you've written there. ‘Making a calculation is the only possible way to find this move’ is true but not when the calculation goes some some billion and trillion plies deep.

As for the term professionals, it has been supported by people like Hikaru Nakamura that only the very top-level players can earn a living playing chess. The WR has been shown to only employ people at the top of their fields, and chess instructors are no different. A chess “professional” is someone who can make a living out of playing chess. Most high-level players have to branch out from just playing since they are unable to make such a living. They write books, coach students, or work other jobs. Only the top 50-100 players in the world are above such a bar.

(“How GMs make a living” Chess.com)



(Shows how only the top 100 players can earn a living wage playing chess)

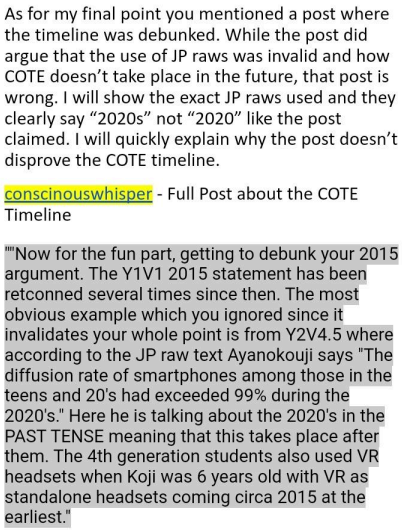
6-) In this part of the document, they claim that their interpretation of the word ‘professionals’ is supported by Hikaru and right.

The fact that I have to debunk this is just sad, like what am I doing with my life...
I will make a quick summary of what is wrong with this interpretation:

First of all, the fact that you go by an individual's interpretation is wrong. While Hikaru is one of the persons I respect the most, The international governing body for chess and related matters is FIDE and you have to obviously follow their interpretation. FIDE regards anybody with appropriate and proper norms and a minimum benchmark of specific elo to be professional. The titles are given from rating of 2000 (minimum). There's also special titles called AFM (Arena FIDE Master) and ACM (Arena Candidate Master) which is given to anybody who has played and won a series of 150 bullet games, 100 blitz games Or 50 rapid agens with a performance rating of over 1400 and 1100 respectively. This interpretation is wrong because it contradicts the interpretation of major governing body of chess called FIDE.

Second, this type of interpretation only accounts for money earnt. You've only regarded the top 50-100 as professionals as they are the only ‘to earn livings’. GothamChess currently makes the most money of all international chess players, even though he is retired and doesn't even play chess OTB anymore. By this logic, since he makes a lot of money, he will be a professional too. But he doesn't even come close to the top 500 let alone 100. He doesn't play real professional chess goddammit. By this logic, he is a better professional than any GM who hasn't played for a year, but that's horribly wrong. Your logic is flawed as it only accounts for money earnt and not the rating specifications.

Third, This interpretation is also subjectively incorrect due to certain circumstances and not objective or concrete. When you consider IMs like Silman and Dvoretsky who are not even alive today (they sadly passed away) but still make more money than any random GM due to their articles and books which are the most popular in the entire world. By your logic, you consider someone with better prospects at living to be a ‘better professional’. This is like saying just because a student doesn't get good grades and has a bad reputation, he isn't a student. Just because a businessman doesn't get good deals and is criticized by everyone, he isn't a businessman. Just because a character is evil and hated by many (like Friend or Griffith), he isn't a good character. Obviously people who have passed away aren't even considered people, let alone professionals.
For these exact reasons, you are wrong. We have to consider FIDE's interpretation only. *My point remains.*


As for my final point you mentioned a post where the timeline was debunked. While the post did argue that the use of JP raws was invalid and how COTE doesn’t take place in the future, that post is wrong. I will show the exact JP raws used and they clearly say “2020s” not “2020” like the post claimed. I will quickly explain why the post doesn’t disprove the COTE timeline.

conscinouswhisper - Full Post about the COTE Timeline

""Now for the fun part, getting to debunk your 2015 argument. The Y1V1 2015 statement has been retconned several times since then. The most obvious example which you ignored since it invalidates your whole point is from Y2V4.5 where according to the JP raw text Ayanokouji says "The diffusion rate of smartphones among those in the teens and 20's had exceeded 99% during the 2020's." Here he is talking about the 2020's in the PAST TENSE meaning that this takes place after them. The 4th generation students also used VR headsets when Koji was 6 years old with VR as standalone headsets coming circa 2015 at the earliest."

7-) In this part of the document, they have seemingly recanted their interpretation of the timeline.

Agent has already addressed all of this in a separate part of his own document. He has also shown why the 1 trillion moves per second thing is a dead and flawed argument. I mean these guys really used Discord bots to translate so yeah this was expected.

Heres Agent's document as a whole :
https://docs.google.com/document/d/1OUn-f0CwTfrA5JnndHOlGqyjVYh_N5OGt9MxBSoRUjM/mobilebasic

Obviously the timeline has little or no effect on what we're trying to stress as we have both shown in our respective documents. Anyway, still we had to debunk their interpretations of Discord bots. Honestly I'm truly surprised that they used bots to translate. That being said, everything about the timeline is debunked as well.

Many of my points weren't even addressed. You can literally see they have only included some five or six statements. What about the rest?

This document was nothing but fan-service, everything is this document is also debunked. All of my points remain completely.

Miscellaneous Statements Debunk

1} “Ayanokouji calculated 1 trillion positions per second”

You're already advised, This is going to be a bigger rant than the fucking LN itself.
Here's a list of everything wrong with this:

- First of all, they have assumed Tsukishiro's ‘machine's to be desktop computers. As already shown several times in this document, that is horribly wrong and completely flawed. For the risk of repeating myself, ‘machines’ could also be laptops, smartphones, AI voice assistants, tablets or just about any device. This whole thing about Tsukishiro's ‘machines’ being some three or four desktops is deadass bad.
- Second, there's no mention of a fucking engine in the LN. The word ‘engine’ Or ‘chess engine’ isn't even used in the first place. The mechanism that the engine would use naturally isn't stated either. These guys have made an assumption that Tsukishiro's machine would have the best engines updated to the latest versions with the greatest mechanisms and that too on good computers. None of this is true. It's a damn headcanon.
- Third, this whole argument comes from Koji playing a move better than the best move of computers. I've already shown throughout this as well as my original document that making a move better than the computer is fairly easy and has been done by professionals and masters on a regular basis. You don't have to calculate even a hundred positions to do so.
- Fourth, making a move better than a computer engine doesn't equate to more computing power. This is the most braindead argument they've presented in their document. I've already proven this several times in my original as well as this document. A human can only play a move better than a computer by better evaluation. Never once has a human calculated more positions than a computer. I've given many examples to prove this point also. An argument that Huntsman the

9-year-old presented here was that ‘none of your examples show humans ‘out calculating’ computers’, and I've already addressed and debunked that. Humans don't out calculate computers, they only evaluate better. The way a human thinks is different from how a ‘machine’ thinks. It's that fucking simple.

- Fifth, This whole argument about a 2D character calculating some trillion positions per second directly contradicts the concept of Candidate moves. Candidate moves is a conceptual idea introduced by GM Alexander Kotov in his book ‘Think like a Grandmaster’. Not only does a man not have the necessity to calculate a 100, let alone a trillion positions, he also doesn't need to do so. It's that simple. Here's more about Candidate Moves : https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://en.m.wikipedia.org/wiki/Candidate_move&ved=2ahUKEwig97vpzK2EAxX4i2MGHdKSB28QmhN6BAgWEAI&usg=AOvVaw0lbUBbNGeREdYwYH43l0fE
- Sixth, the narrative itself debunks this argument. In the LN, When ESE is over, Koji and Arisu start playing from the same exact position that Tsukishiro changed, in a library. It is shown and stated in the LN itself that Arisu lost after a few moves (when Arisu states ‘There's really no way to get out of that check). Now, I'm pretty sure that ‘few’ means less than 10 moves. 10 moves are equal to exactly 20 half-moves (plies) or 20 positions. As one can see, 20 is nowhere, not even remotely close to 1 trillion. He only had to calculate around 20-30 positions. He simply has no need to calculate trillion positions when he has a win at hand within 20-30 positions. The narrative itself shows us that this argument is p*ssy.
- Seventh, Tsukishiro said that ‘he was planning to use a different move, a move even better than the best we could come up with'. This shows that Koji was only capable of doing this only time and that too he took more than three minutes to think about this (this is directly stated and shown in the narrative). Nowadays it is generalized that he can casually just calculate 1 trillion moves per second. Just goes to show that COTE’s saviors can say anything and people will believe it.
- Eighth, This whole argument comes from Ayanokouji playing a move better than a computer. This whole argument is so bad because engines don't understand some positions as I've shown this exactly in my original response as well as this document. Everything they challenged about this is also debunked and I've shown this in my original as well as this document. Sometimes, engines can't even see checkmates which is just a proof of how hilariously pissant their arguments are. Here's proof : https://www.youtube.com/watch?v=oiQeePWjHTI
- Ninth, another thing wrong with this argument is that he simply has no necessity to do so many calculations. This argument was presented by KiyoKouji in your debate with him (and you ducked it) and is directly and explicitly supported by the LN's narrative itself. Let's just make the assumption that Arisu was capable of calculating a hundred moves in a row even though it is not stated nor supported. That only means 200 positions still and as we know it is not even a tiny fraction of the fancy number that Huntsman's dumbass has presented.
- Tenth, this argument completely forgets that Koji is playing against Arisu, not some fucking computers. He's playing against a human, not an engine Or a computer. He simply had no need to calculate even a hundred positions to win.

- Eleventh, it is simply forgotten that Arisu was about to get checkmated unless Tsukishiro intervened. This is directly stated as after the ‘The endgame was soon approaching. With my next move, the check-mate would be all but certain.’
- Twelfth, nowhere has it been taken into account that Koji took over Horikita's position which was already better than Hashimoto's position. This is directly stated by the narrative : ‘Now, only a faint glimmer of Horikita's lead still remains. Her hands stopped moving...’ and after this Koji takes over before some monologues. It is correct that when Koji took over, he had an advantage. That being said, the game got even because he didn't want to give Arisu any specific imbalance (directly stated; ‘If I made a single mistake, she would probably rush me all over at once’)
- Thirteenth, Tsukishiro said ‘He was planning to use a different move. It was even better than the best we could come up with'. As seen, Tsukishiro said that Koji made a move better than ‘machines’. In real-life context, whenever humans made moves better than computers, they always evaluated positions better than computers and never calculated more positions. (In this document, there are more than 17 examples signifying this) Obviously this statement is to be given meaning from real-life context or IRL context and not what our beloved Huntzer (Huntsman the patzer) with 69+ years of experience and his minion thinks.

For these exact reasons, this argument is debunked. Everything has been taken from Huntsman's document and the LN. I haven't said one thing of my own. You can literally check it.

2} ‘The depth calculation in this document is hilariously bad lmao. It ignores the screening process completely.’

You're again advised, this is going to be another long yapping session about why the Perft argument is completely correct.
Here's a list of the points :

- Tsukishiro’s engines’ depth is taken from direct reference with the Perft results and SF16’s pruning algorithm. The Perft table argument is combined with SF16's pruning algorithm argument. The primary reason that it doesn't ignore the screening process is because the Perft results argument isn't presented in itself. If only the Perft results table was shown, it would be more or less irrelevant as it is really just showing a correlation between Brute Force computations and total computing capacity. But with SF16's pruning algorithm directly shown from chess.com, it shows us how raw computing power correlates with calculation and evaluation depth of a high ranking engine. In one circumstance it is one of the best case-scenarios for Tsukishiro's computers. Then again, it's taken with assuming that Tsukishiro's ‘machines’ had engines that calculated on the basis of pruning which is an assumption, but obviously it makes more sense than the author's arguments that Tsukishiro's computers had engines that calculated some 100 trillion ‘good’ positions which is one blunder and assumption after another.
- Another primary reason why this is right is because I took two positions to show whenever a hallmark of a trillion was reached. Not just the initial (starting) position,

but also a random position in which a hallmark of more than 11 trillion was reached. If only one position was taken and that too the initial position, this would be wrong. But I've taken two, the initial as well as a random position. Therefore, this is also true.

- Another reason why the Perft results table and SF16's composite argument is right is because there's no mention of an engine in the Y1V11 of COTE when the alleged 'CF' takes place. Obviously as there's no mention, you can't just take the best engine with the latest updated version following all the great calculation and evaluation mechanisms. That's not how this works, there's no mention. So we have to go with averaging.
- Another reason why this argument is right is because of the ambiguity of statements in the LN. Nowhere has it been said whether Tsukishiro even used chess engines. He simply says that he had a lot of 'machines' to account for his options. You can clearly see and compare with the LN itself; there's no mention of an engine. That being said, the fact that you guys took these statements as some engine which follows pruning and 'machines' which have a huge amount of computing power is horrendously wrong.
- The whole 1 trillion positions per second is taken from taking the average computing capacity of an average desktop computer of 2023 and is deadass bad. I've already shown this repeatedly throughout this document and there's no need to elaborate further because there's been no mention of the 'machine' used and there's completely no mention of a chess engine.
- Agent, in his document has elaborated in a much more simplistic and easy to understand way.

For these exact reasons, the Perft results table + SF16's pruning algorithm composite argument is completely right and correct. I'll move on to other statements now.

3} 'WR has international access. So they can bring people from overseas'

Fuck me, I've already shown that WR is only affiliated with a political party called the Citizen's party. The only information about international affairs addressed within the LN is that Atsuomi leaked information to foreign organizations hostile to Japan. It is nowhere stated whether he or the WR for that matter is connected to foreign organizations. This means that Atsuomi isn't connected to international leaders. It also means that the WR isn't affiliated with international entities, as there's no mention of WR there. So how could he bring chess GMs and other world class players while he doesn't have overseas connections. It is not possible. A political party only has sovereign control, not international control. Even then, the only case in which a political party can have sovereign control is when it has formed the government. There was also another argument that said something like 'There are many instances of Atsuomi making contact with foreign executives' This again is only about Atsuomi, nothing has been stated about the WR here. This argument was just plain bad.

4} 'The narrative portrays Koji to be the best, not some mere 2100'

Fuck me again, you really didn't understand what I said there, did you? First of all, the narrative doesn't portray him to be the best. The narrative classifies him as unbeaten and I've

already addressed all of that before. Nonetheless, I'll still explain briefly here. Him being unbeaten in a field of players is a statement. I've already said that we have to discard all statements when scaling this feat. Matter of fact, this whole thing is called ‘CF’-Chess Feat; not ‘CS’-Chess Statements. Even then, If we were to consider this statement, it isn't some godly thing to be unbeaten in a field of 2200’s as I've shown. The rating part really went over your head, while I have said this is an estimate of the performance rating based on the kind of game they played, I never said that their actual ratings were so. You've completely misinterpreted what I've said, I said their performance rating estimate is around 2000-2200, not their actual ratings. You cannot guess someone's rating based on one game alone. You've literally generalized the lie that I said his elo was 2200. Read my goddamned document once again and see for yourselves what I've said. It is above for God's sake.

5} ‘In this document, we are essentially disregarding the fact that Tsukishiro also had personnel to detect Koji's feat.’

Oh wow, you really don't even know your own narrative, do you?
In the LN, Tsukishiro says, "I had a significant number of personnel and machines to account for his options". Funnily enough, the word professional isn't even deadass mentioned.
In the LN, the word 'personnel' is used and not 'professional'. These ‘personnel’ could be bodyguards. They could also be his henchmen. They could also simply be computer maintenance staff who could've informed Tsukishiro about stuff regarding the game. Besides, even if these guys were professionals, I have already stated in my original document only that they would find this move but It would take them some time. Koji simply thought of it faster than them. It's as simple as that.

6} ‘At least, this is his rating estimate at an extremely low-ball’

Absolutely fucking not; In the LN, Kiyo said ‘I used the full extent of my ability to prevent her from closing in on me’. So, he's definitely at his high ball. That being said, at most his real-time elo would be around 2300.

7} ‘A machine is an apparatus having several parts, thus the only thing that would make sense in this context is a desktop computer as that is the only electronic device that has parts.’

Whoever made this argument definitely has a better brain than the authors of CF disregarding @Gabybel76. Let me explain in detail :
A desktop is not the only device that has parts. Actually, a smartphone or a laptop for that matter is just a simplistic and composite miniature of a desktop.
A smartphone has a display while desktops have a screen and monitor, a smartphone has a screen as a keyboard while a desktop has a keyboard for a keyboard. A smartphone has a front and back camera while desktops have webcams. The ‘parts’ of a laptop or smartphone are just combined into one single miniature.
That's why all of these devices are liable for consideration to the meaning of ‘machines’. Your argument is good but is flawed.

7} ‘Your entire document is based on making moves like Mh6’

Dude.... what the fuck is Mh6? That's not even legal chess notation. I think you meant Nh6 which means ‘Knight to h6’.

Completely not, only the first part is based on explaining the fact that knowing moves is important. At some parts, I've stressed on the fact that knowing moves is important. The whole document isn't based on the necessity of knowing moves. Everything else has been addressed in their respective contexts. The only moves we know about in the game are 1. e4, 1.... e5, 2. Nf3 and 2.... Nc6. That's it. These moves have been directly stated by Hashimoto and Horikita.

8} ‘This whole document is of little importance because of the timeline. ’

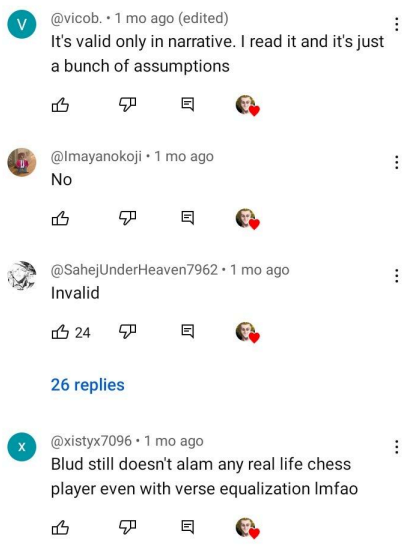
The timeline has little to no relevance on all of these arguments especially with the high ambiguity and lack of concrete statements. I've already shown this and explained why the timeline has no or little relevance in this context. No matter which engine or computer is used, they still make simple mistakes; this is especially evident in cases of Best engines like Stockfish, Houdini and Komodo who were running on supercomputers yet could find the moves mentioned in the examples, or find the solutions of the puzzles. This is already explained and thus the argument is stupid.

9} ‘In all of your examples, you've included moves made by GMs and super GMs. Doesn't this contradict your notion of Arisu and Kiyo being around GM level?’

Nope, because of the golden rules of chess. You don't become a GM or IM by defeating a GM or IM and making one move better than a GM as well as IM. For becoming a GM, there are two criteria, You need consistent performance of a GM in a high-level tournament or GM level tournament, something known as a ‘Norm’ and a rating threshold of the title, which is 2500 for GM and 2400 for an IM.

———————————————————————————

Thus all the irrelevant arguments are also debunked. For this matter alone, I'll show that one of COTE's saviors, the man Sahej, also doesn't consider this fantasy valid.



This was from a poll conducted by Schmel, you can find it in the community post which says 'Is Ayanokoji's Chess Feat Valid?'

As you can see, it is evident.

Conclusion

With over 47+ invalid statements in the document and 29+ serious errors, I successfully conclude that this fantasy is debunked.
Both attempts at rebunking this fantasy were nothing but fan-service. This whole thing is completely closed for discussion. It is irrelevant, invalid, erroneous, false and headcanon.

If you have any questions, don't ask me. I've included everything here. You can contact me at @Farhen007 on YouTube, or at my E-mail address : bobfisch1975@gmail.com.
Discord : farhen007
Agent's discord is already mentioned above.