Chapter Three

Taking on *Transwarp*

In this chapter I want investigate some of the remarkable changes in the chess world over the last few years, due to the increasing strength of computer chess programs. The turning point, of course, was the 1997 "man versus machine" match when Kasparov was stunningly defeated by the IBM computer *Deep Blue*. Ever since then it has been a case of "if you can't beat 'em, join 'em", and today's professional players are often highly dependant on chess programs. What I will try and look at is the best way that a player can harness that remarkable processing power, when using it in the preparation and the analysis of their games.

"Be afraid, be very afraid." So runs the tag-line of the 1980s sci-fi classic *The Fly*, directed by David Cronenberg. Starring Jeff Goldblum as the eccentric scientist Seth Brundle, *The Fly* basically illustrates the dangers of delving too far

into science. And this is a problem that also faces the chess world, with the rising dominance of computer programs. I can envisage a time in the not too distant future where almost every reasonable theoretical novelty is to some degree computer-generated. It's already getting that way. Of course, computers are still some way off "solving chess", if indeed such a thing is possible.

The often quoted cliché that illustrates how complex and deep chess can be is the one that states that there are more possible moves in a game of chess than there are atoms in the universe. The human mind cannot possibly grasp how tiny an atom is, it can much less comprehend the awesome vastness of the universe. Even if computers do solve chess, it is unlikely that we will be able to get our minds around that fact, so probably chess isn't ever going to be killed off completely. But in the mean-

time, computers will continue to get stronger and stronger. So do we turn our backs on the computer technology, or do we embrace it? I believe real improvement in chess comes through studying our own games in a very detailed manner, without the assistance of an artificial program.

It's too easy to have the computer running away in the background, doing all the work for us. Then we don't get the pleasure or the understanding that comes from finding improvements and discovering ideas on our own. Using a machine probably shortcuts the time we take on analysis by about 80 percent, but the other way is much more fulfilling, and in the long run more likely to benefit our chess.

Nevertheless, I'd be lying if I said that working with computers can't in some way improve our chess abilities. Putting our games through *Rybka*, *Shredder* or *Fritz* can be an eye-opening experience when we discover just how much we have overlooked. Computers are also ideal sparring partners. Probably the strongest program that is commercially available is the Russian program *Rybka*. On the Internet Chess Club (the ICC) it goes under the moniker 'Transwarp' and has a ridiculously high ICC blitz rating of around 4000. To give you some perspective, the leading blitz players in the world, like Radjabov and Nakamura who play regularly on the ICC, are at best some 400-500 points behind, at around 3600.

My normal rating is around 2900, although I have touched the "giddy" heights of 3200 in the past. Under *Transwarp*'s notes it reads: "Running Deep Rybka 3.0 x64.", as well as "16 losses at blitz and standard since using Deep Rybka 3, 8 losses on time, eight by mate." Given that it has played some 9000 games on there in that time, that should give you some idea of how hard the dastardly thing is to beat. In fact one of those losses was to yours truly (something that I'll be dining out on for years to come), after the highly irregular opening 1 e4 c5 2 ♘f3 d6 and now the startling novelty by *Transwarp*, 3 ♘d4?? (presumably a computer glitch). Maybe there is hope for us after all! *Transwarp* gains its "revenge" in the following encounter.

Game 12
D.Gormally-*Transwarp*
Internet Chess Club
3-minute game 2009
Sicilian Defence

**1 e4 c5 2 ♘f3 d6 3 d4 cxd4 4 ♘xd4 ♘f6 5 ♘c3 a6 6 ♗e3 e6 7 g4!?**

This introduces the famed Perenyi Attack, named after the late Hungarian player Bela Perenyi. It is by far the most aggressive response to Black's move order, and if Black makes the critical response, 7...e5, then White must be prepared in many lines to sacrifice a knight on f5. Shirov is among the great-

est advocates of this line for White. However, Black has ways to avoid this thorny path and obtain a playable position, without getting involved in such dangerous complications, which is exactly what Transwarp does.
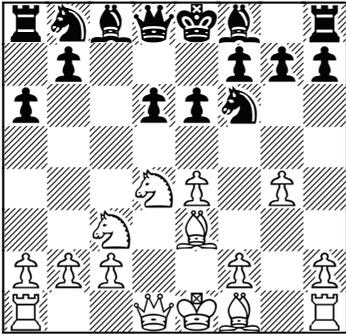
7...d5!?

7...e5 8 ♘f5 is the main line which, as I mentioned, leads to unfathomable complications. Critical now is 8...h5!? which is what Transwarp switched to in one of our subsequent blitz games. The main idea is to undermine White's control of f5 so making any subsequent ...d5 break much more effective: 9 g5 ♘xe4! 10 ♘xg7+ ♗xg7 11 ♘xe4 d5
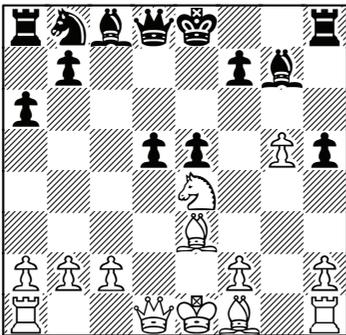

12 ♘f6+? (oh dear, the benefit of not bothering to learn any theory; the normal continuation here – if anything about such an opening can be described as "normal" – is 12 ♘g3 d4 13 ♗d2 ♕d5 14 c4 dxc3 15 ♗xc3 ♗e6 16 ♗e2 ♘c6 17 ♕xd5 ♗xd5 18 0-0 which is about equal) 12...♗xf6 13 gxf6 ♘c6 14 c3 d4 and already I threw in the towel in a rather demoralized fashion, as ...♕d5 is coming and White's pawn structure resembles a train wreck.

8 g5 ♘xe4 9 ♘xe4 dxe4 10 ♗g2

10 ♕g4!? is probably the most incisive reply. The game E.Sutovsky-K.Georgiev, Gibraltar 2007, continued 10...♗e7 (10...♕d5!? 11 ♗g2 ♕c4 would be similar to what *Transwarp* did) 11 0-0-0 ♘d7 12 h4 ♕a5 13 ♘b3?! (typically bold play by Sutovsky; he does not fear the capture on a2 as he believes that with the queen "stranded" there, White will be able to build up a dangerous initiative) and now:

a) In the game Georgiev fell for the "bluff": 13...♕c7? 14 ♕xe4 ♖b8 15 ♖h3 ♕e5 16 ♕g4 f5 17 gxf6 ♕xf6 18 ♗g5 ♕f7 19 ♖f3! with a very promising attacking position for Sutovsky, who not surprisingly went on to win, as the inventive Israeli normally sacrifices his whole army to create such a situation!

b) The computer, of course, is not at all impressed with Sutovsky's "imaginative" idea and suggests that Black should take the bait. Indeed, much more to the point is, of course, 13...♕xa2! 14 ♕xe4, but what now?
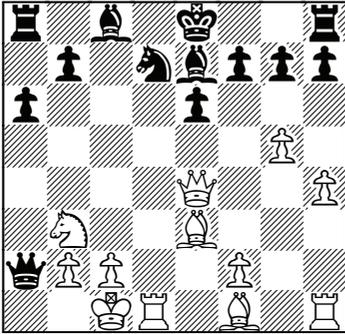
14...a5! (of course! the computer doesn't fear the bishop's foray into b5, which would surely frighten most carbon-based players) 15 ♗b5 a4 16 ♖xd7 ♗xd7 17 ♗xd7+ ♔f8! 18 ♘c5 a3! with oodles of counterplay. The fact that Georgiev disregarded the capture on a2 is a good example of how even strong grandmasters sometimes over-rely on their strong intuition, and are sometimes too dismissive of a line, perhaps because they are fearful of the calculation involved. So they go for the "easy" move instead, thereby missing chances to turn the game in their favour.

10...♗e7 11 h4
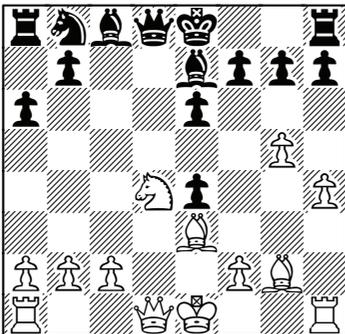
11...♕d5!

It never ceases to amaze me how programs like *Transwarp* can play moves which seem so counterintuitive, yet somehow contain such impeccable logic. At first this move seemed ridiculous – Black puts his queen in front of the pawn? Surely any subsequent ♗xe4 is going to embarrass the queen? The logic of this move only became clear after my next turn.

12 ♕g4!? ♕c4!

This is it! Suddenly I saw *Rybka* was threatening to play moves like ...♗b4, so I panicked. Playing against other people at blitz can sometimes have the effect of revealing your weaknesses; playing computer programs at blitz has the tendency of exposing holes in your game big enough to drive a lorry through.

13 ♗xe4?

13 ♕xe4! ♕b4+?! (13...0-0!? 14 c3 ♖d8 is a more sensible way to play, although here 14...♘d7?? is an outright howler: 15 ♘f5!) 14 ♔e2 ♕xb2 and while I would under normal circumstances probably contemplate this position as quite promising, as the black queen has lost so much time, against *Rybka* at blitz it's quite hopeless: I'm down a pawn so I can simply resign! But in all seriousness, if White finds 15 ♖ab1! Black may come to regret the queen sally after all: 15...♕xa2 16 ♖xb7! and White fights back.

13...e5

Ouch.
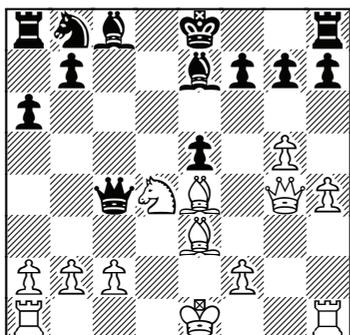
14 ♘f5 g6 0-1

A good illustration of why taking computers on at blitz is such a thankless task – you have to perform remarkable feats of calculation that would be difficult enough in a long-play game, let alone when you have three minutes on your clock for all your moves.

The YouTube Heroes

Hikaru Nakamura from the USA is one of the most uncompromising players in the world right now. He seems to detest draws and will take extravagant risks to avoid them whenever possible. If he was a poker player, he would be "all in" every hand, and sometimes he gets criticized for this approach. While it's easy to settle for mediocrity, only by taking risks and throwing off the shackles – and the fear of defeat – will a player be able to reach his full potential.

Actually there's a funny video of Nakamura on YouTube that I found. He's one of the best blitz players in the world (if not the best), and in this video he's playing a fellow American, Akobian. At some point in an endgame, Akobian picks up a replacement queen at the side of the board, in rather optimistic anticipation of promoting a pawn in the next few moves. Nakamura flashes him a look of complete contempt, with the aside "You gotta be kidding me!" followed a little later by mating Akobian's king with savage violence. Talk about unbridled aggression!

Nakamura had an up and down tournament in Gibraltar in 2009, over-stretching in a couple of games, and he only drew one game, in the last round. Still Nakamura is one of the new breed of players that have embraced the new technology, and a lot of their play is at times very similar to what you might expect from a computer. I believe that there is a trend for authors now to give long, incomprehensible lines of analysis gleaned from working with computers. However, in this chapter I want to try and make real sense of what these lines actually mean and the logic that underpins them, while at the same time trying to give the reader an understanding of how best to use computers to improve their play.

Game 13
H.Nakamura-V.Golod
Gibraltar 2009
Ruy Lopez

1 e4 e5 2 ♘f3 ♘c6 3 ♗b5 a6 4 ♗a4 ♘f6

5 0-0 ♗e7 6 ♖e1 b5 7 ♗b3 d6 8 c3 0-0 9 h3 ♘b8
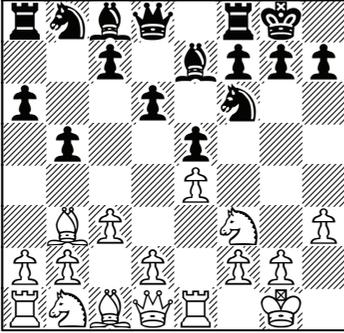
The Breyer variation of the Ruy Lopez, a favourite of former World Champion Boris Spassky. It tends to be a particularly difficult nut to crack, and the emphasis on strategy is probably a wise choice against a tactical whizz kid like Naka.

10 d4 ♘bd7 11 ♘bd2 ♗b7 12 ♗c2 ♖e8 13 ♘f1 ♗f8 14 ♘g3 g6 15 b3 ♗g7 16 d5 ♖c8

Not surprisingly this has all been played many times before.

17 ♗e3

17 c4 is perhaps the main line. White will try to support the d5-pawn so as to suffocate the bishop on b7.

17...c6 18 c4 ♘b6!?

18...♕e7 is an alternative. The computer (I was working with *Fritz 11*) prefers this move, as it may seem more flexible than what Golod played. Grandmasters are generally loath to commit themselves too soon, and with 18...♘b6 Golod already indicates his intention to sacrifice on d5. After

18...♕e7 19 ♕d2 ♖c7! 20 ♖ad1 bxc4 21 bxc4 cxd5 22 cxd5 ♖ec8 23 ♗b1 the machine wants to play 23...♘c5! with the intention of leaping into c3 via a4, making further inroads on the queenside.

19 ♕e2

The computer prefers 19 ♖b1. Although some might find this move rather baffling, it does have the advantage of moving the rook from a1 (which may become significant if Black sacrifices on d5, as this will free the bishop on g7, which in some lines will hit that rook down the diagonal), and also prophylactically aims down the b-file, in case of any exchange on c4.

Incidentally 19 dxc6 is a positional error, freeing Black's light-squared bishop: 19...♗xc6 with fluid play for Black.

19...cxd5 20 cxd5

Now how to break the bind on the centre?

20...♘bxd5! 21 exd5 ♘xd5
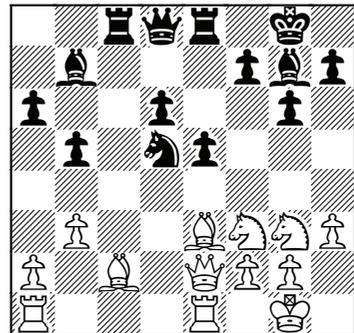
22 ♖ac1!

Incredibly this position features on

my *Fritz 11* opening database, and the move it suggests is 22 ♗e4 instead. However, it would seem that Black gets the better chances after 22...♘c3 23 ♗xb7 (23 ♕d3? d5 regains the piece with an overwhelming position) 23...♘xe2+ 24 ♘xe2 d5! (this takes the sting out of White's initiative) 25 ♗xc8 ♕xc8 and now after 26 ♖ac1 ♕d7 *Fritz* says that Black's chances are favourable, approximately a pawn to the good by its assessment system, and given his preponderance in the centre I'd have to agree. White has a rook and two pieces for the queen, but the huge centre more than counteracts that.

22...♘c3 23 ♕d2
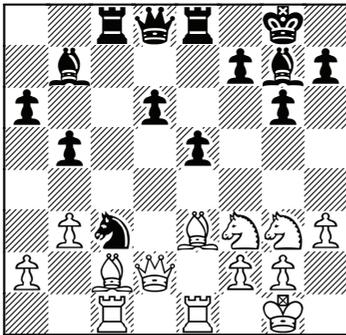
23...♘xa2

Fritz prefers 23...♗xf3, but I'm less convinced by this. It gives the line 24 gxf3 d5 25 ♗d3 d4 26 ♗h6 f5 27 ♗xg7 ♔xg7, and now it likes 28 a4!?. Black has some compensation here, but it's difficult to imagine it's enough. Golod's choice is more ambitious.

24 ♖a1 ♘c3 25 b4!

Creating an outpost on c5, and get-ting ready to activate the light-squared bishop on b3 in many variations.

25...d5 26 ♗b3

The remorseless machine wants to play 26 ♗h6! immediately, and as the d5-pawn blunts the bishop on b3 for the time being, this is indeed more direct: 26...♗f6 27 ♘h2! (the knight does little on f3, and so White reroutes it to a far more effective square) 27...♕d6 28 ♘g4 ♗h8 29 ♖ac1. Now:
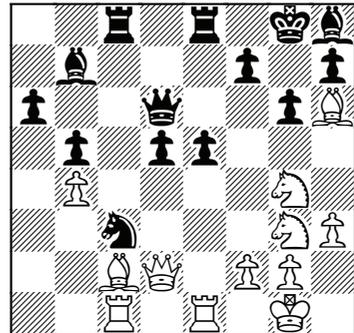
a) What would your suggestion be if Black tries to reinforce the knight with 29...d4 here? This hardly slows the computer down – it wants to play the very forceful 30 f4!, but that allows 30...e4, right? The only move to keep the position closed? Wrong! It then snaps this off instantly, showing a complete lack of respect (silicon minds have no concept of pricked egos): 31 ♗xe4! (taking advantage of the weakness of the back rank) 31...♘xe4 32 ♘xe4 ♗xe4 33 ♖xe4! ♖xc1+ 34 ♕xc1 ♕b8 35 ♕e1 and Black can pretty much resign. A tactical monster!

b) Black can try 29...♖c6 instead. Then 30 ♗f4!? (30 ♗xg6 hxg6 31 ♖xc3 ♖xc3 32 ♕xc3 f5 is another line, but here the centre is starting to roll, and White has fewer tactical chances) 30...h5 31 ♘h6+ ♚f8 32 ♗g5 with what can only be described as a mess, although *Fritz* slightly prefers Black after 32...e4 33 ♘e2 ♘xe2+ 34 ♕xe2, saying he's roughly half a pawn ahead. Personally speaking, in a practical sense at least, I'd rather have the extra piece.

26...♕e7!?
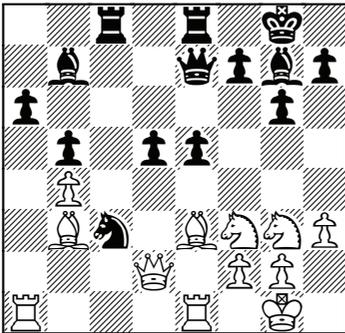
The direct attempt to win the b4-pawn, 26...e4 27 ♘d4 ♕d6, can be met by 28 ♘df5 (or 28 ♘c2, but then *Fritz* again makes use of tactics to free the bind: 28...d4! 29 ♘xd4 ♖ed8 with an unpleasant pin, as shown by 30 ♖ad1 ♕xb4!) 28...gxf5 29 ♘xf5 ♕xb4 (29...♕g6? 30 ♘xg7 followed by ♗d4) 30 ♘xg7 ♚xg7 31 ♗d4+ ♚f8, which leads to a position where the dark-squared weaknesses around the black king offer very promising attacking chances for White. Now:

a) 32 ♕h6+ ♚e7 33 ♕b6 and here

the machine continues with 33...♗a8 (33...♕xb3 34 ♕xb7+ ♚f8 35 ♕xa6 is only dangerous for Black) 34 ♕f6+ ♚d7 35 ♖xa6 ♗b7 36 ♕xf7+ ♖e7 37 ♕f5+ ♚d8 38 ♗b6+ ♚e8 39 ♗a5! with a monstrous attack.

b) That check is probably the only move! Don't think you can escape the computer. I know what I'd think playing White in this position: it's an interesting position with many possibilities. Surely I must have many ideas? But the machine quickly stamps on any attempts to be "creative": 32 ♗f6 ♖e6! or 32 ♗c2 ♖e6!, both with a decisive advantage for Black, according to the computer, since the rook can always switch to g6 to stop any attack.

27 ♗h6!

Watching this game on ICC, none of the kibitzers seemed to like this move, as their programs preferred 27 ♗c5 instead (a move which is consistent with playing b4 earlier). However, 27 ♗h6! is a good practical move, forcing Black to solve difficult over-the-board problems.

By contrast, after 27 ♗c5 ♖xc5 28 bxc5 ♕xc5 29 ♕e3!? ♕xe3 30 fxe3 ♗h6 an endgame arises where White is almost certainly doing well, but Black has four pawns for a rook, and more importantly his moves are far easier to find than in the game. Instead Nakamura wants to keep the pieces on – he sniffs a mate!

27...♗h8

This is okay, although it does have

the one drawback of leaving the bishop menacingly poised on h6, a fact that Nakamura ruthlessly exploits when Golod goes wrong.

An alternative was 27...♕xb4 28 ♗xg7 ♔xg7 and now I should meekly defend the bishop on b3, right?
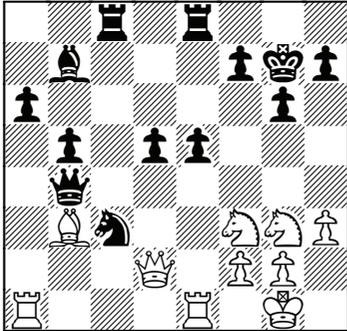

Nope! 29 ♘xe5! (*Fritz* is all tactics!) 29...♕xb3? (or 29...♖e6 30 ♘g4! with an obvious attack) 30 ♘f5+! (it's always useful starting a piece up for attacking purposes, since you can always sacrifice it back; and now the rotten computer announces mate in seven moves!) 30...♔h8 (or 30...♔f6 31 ♘d7+ ♔xf5 32 g4 mate) 31 ♕h6 and mate follows.

Instead 27...♗xh6! might well be best, as I believe it's in Black's favour to exchange as many pieces as possible, drawing the sting out of the white initiative: 28 ♕xh6 f6 29 ♕h4! ♔g7! 30 ♘d4! ♕f8!? (30...♕d7? runs into the nasty 31 ♘df5+! – those knights! – 31...gxf5 32 ♘h5+ ♔f8 33 ♕xf6+ with some advantage) 31 ♘de2 d4 32 ♘xc3 ♖xc3 33 ♖ab1 d3! and Black has definite compensation.

28 ♘xe5!?

Very direct!

28...♗xe5 29 f4
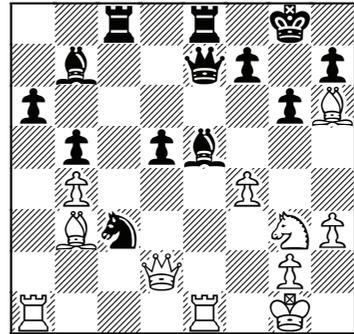
29...♘e4?

Golod cracks! This is a good illustration of why it's often much harder to defend than it is to attack – Black has had to walk a very fine line in this game, something he has done a pretty good job of so far, but just when the critical position arises he errs horribly.

Instead Black can try at least two alternatives, one of which gives him at least a playable game:

a) 29...♕xb4 30 fxe5 ♕xb3 and initially *Fritz* wants to play 31 ♘h5, but after thinking for a while, switches to 31 e6! ♖e7 32 ♕d4 f5 (32...fxe6? 33 ♖f1! and the black king is in a mating net; in fact *Fritz* says its mate in 16!) 33 ♗g5 ♖ee8 34 ♕b6 with an ongoing attack.

b) Critical in fact is 29...♕h4! 30 fxe5 ♕xg3 31 ♕d4! (threatening the devastating 32 e6) 31...♖e6 32 ♖e3 ♘e2+! 33 ♖xe2 ♕xb3 34 ♕a7 ♕c3! 35 ♖c1 ♕xc1+ 36 ♗xc1 ♖xc1+ 37 ♔h2 ♗c6 and White will have great difficulty cracking the
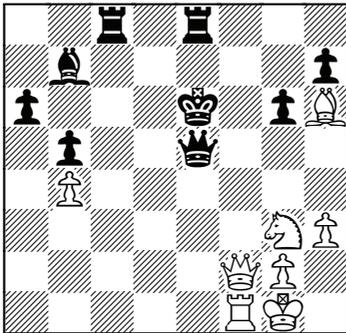
black carapace. In fact *Fritz* even slightly prefers Black here, giving his advantage as approximately 0.1 of a pawn. Indeed, the d-pawn may become important later on.

30 ♖xe4!

Nakamura must have a *Fritz* chip in his head!

30...dxe4 31 fxe5 ♕xe5

Sadly even the inventive 31...e3!? fails: 32 ♕xe3 ♕xe5 33 ♗xf7+! ♔xf7 34 ♖f1+ ♔e6 35 ♕f2! and the computer says the attack is overwhelming.


For example, 35...♔d7 36 ♖d1+ ♔c6 and now the stunning coup de grâce 37 ♘e4!! leaves Black in dire need of visiting the *Rybka* clinic! White wins after 37...♖ed8 38 ♕c2+ ♔b6 39 ♗e3+.

32 ♖f1 ♖e7

32...♖c4 was slightly more resilient, but this is an admission of defeat: 33 ♗xc4 bxc4 34 ♘e2!? e3 35 ♕c3 and White should win in the long run.

33 ♖xf7! ♖xf7 34 ♕d7

Now *Fritz* is giving an advantage of over two pawns for White, indicating that the game is more or less over.
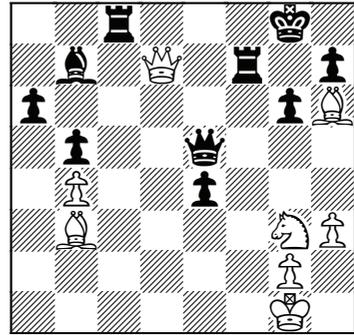
34...♕e8 35 ♕xb7 ♖c4 36 ♗xc4 bxc4 37 ♕xa6

37 ♕d5!?, pinning the rook and threatening ♘e4, was also good enough. But Nakamura continues to play most ambitiously; just in case an endgame should arise, he wants to snap off all the black pawns, leaving him with a passed b-pawn.

37...♖c7

This is also the computer's first choice. In fact it finds it in about one millisecond!

38 ♕d6! ♖d7

Or 38...♖e7 39 b5! (on we go!) 39...e3 40 b6! e2 41 ♘xe2! ♖xe2 42 b7 ♖b2 43 ♕d5+ and mate follows.

39 ♕c5 c3 40 ♕c4+?!

Fritz indicates that 40 ♘xe4! would have brought the curtain down even more effectively: 40...♖f7 41 ♘d6 ♕e7 42 ♕c8+ ♖f8 43 ♕c4+ ♔h8 44 ♗xf8 and wins. However, Nakamura's choice is also easily good enough.

40...♖f7 41 ♘xe4 ♕d8 42 ♕xc3 ♕b6+ 43 ♕c5 ♕xc5+ 44 bxc5 ♖e7 45 ♘d6 ♖e5 46 c6 ♖c5 47 ♘c8 ♔f7 48 ♘a7 1-0