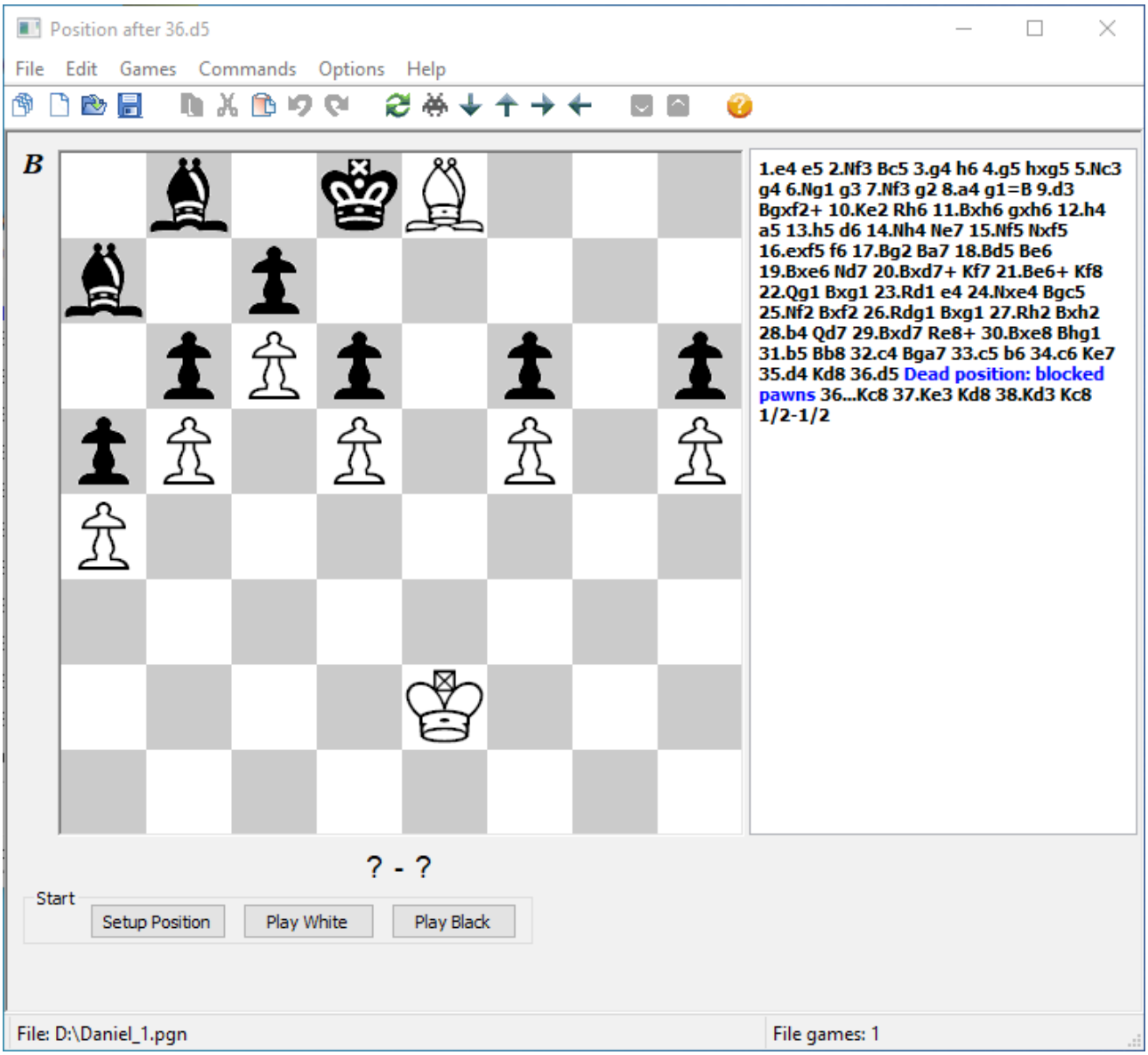
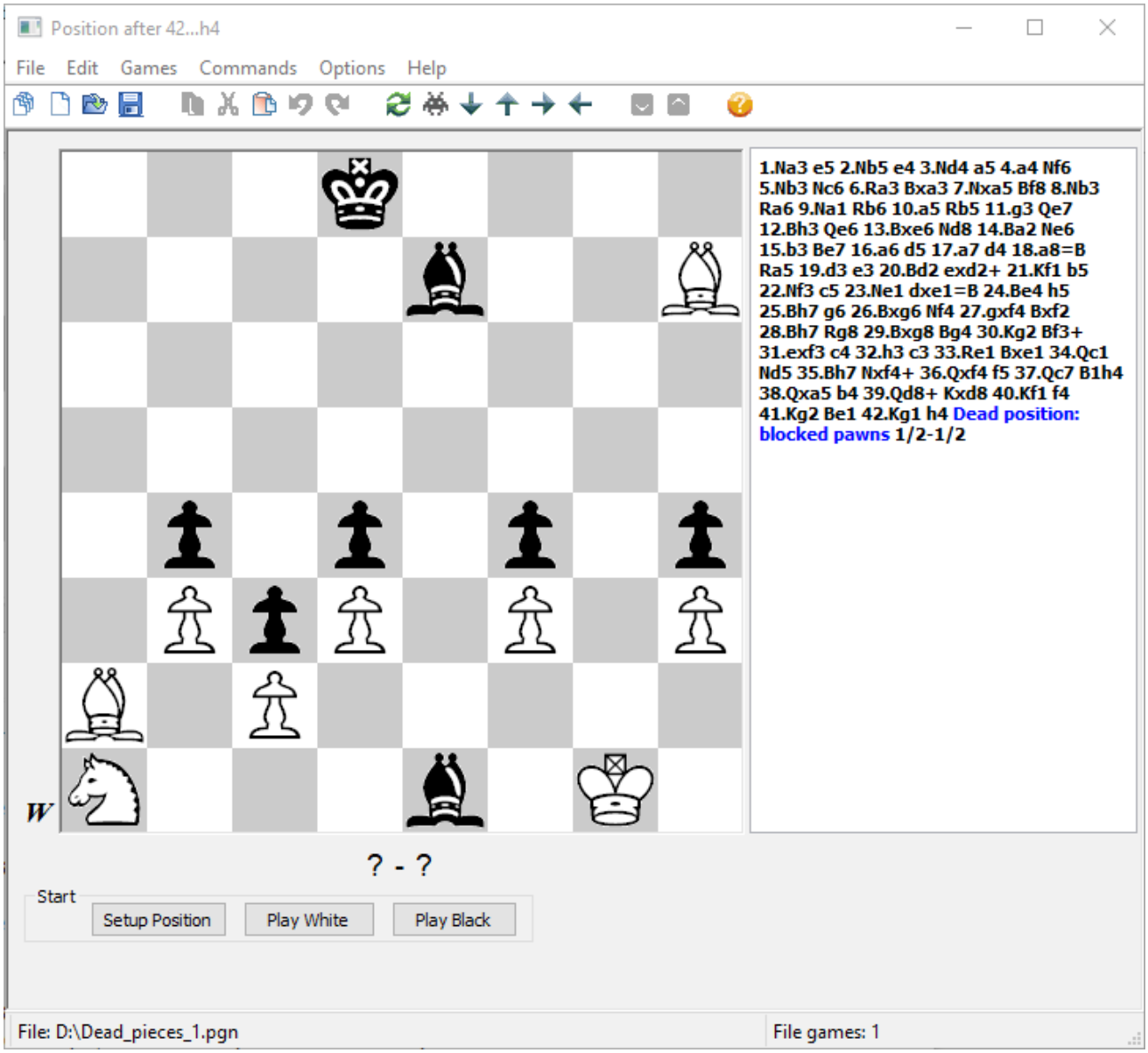
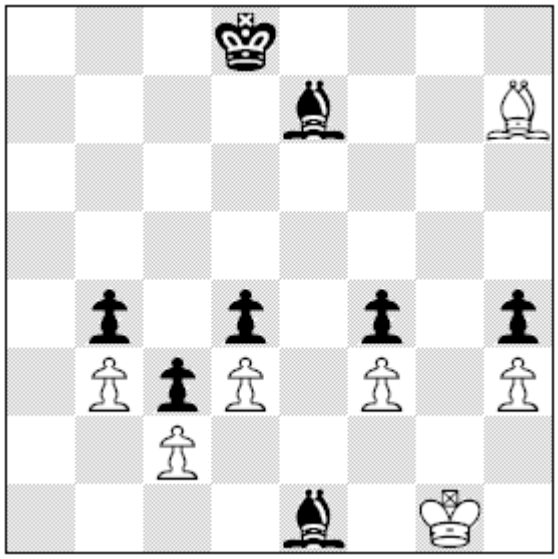
Here are some examples of positions parsed by PGNdraw, and the limitations of this type of analysis. You were right, there were problems in this position



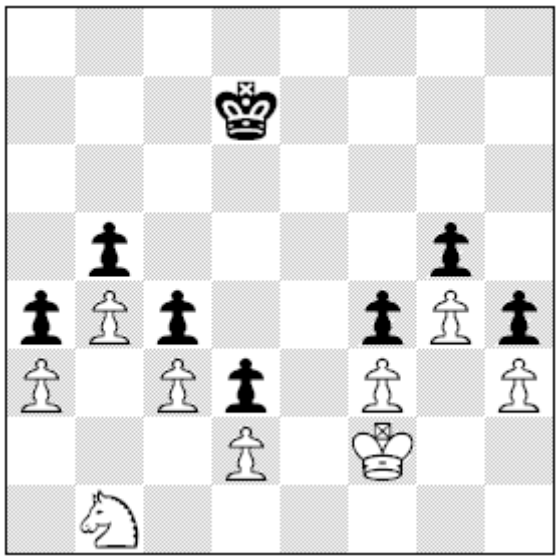
The analysis based on bishops on b8 and a7, and a light-squared white bishop outside its pawn chain, can normally lead to helpmate for Black, but not here because the black king does not have a path to a8. So this is still a draw. To solve it, I instead chose to eliminate “dead” pieces like the bishops on b8 and a7. In that case analysis continues without those two bishops present, and the result is a dead position.



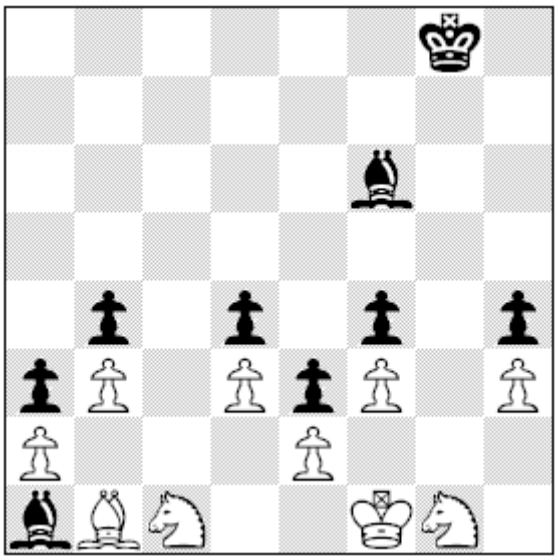
In this position, ♘a1 and ♗a2 in fact do not influence play at all. So I eliminate them in the analysis as though the position was just



There are other examples of dead pieces that I handle this way. Any white knight on the first rank or black knight on the last rank which is blocked by own pawns is handled like this, eliminating it from the analysis. This means the following position is also a dead draw:



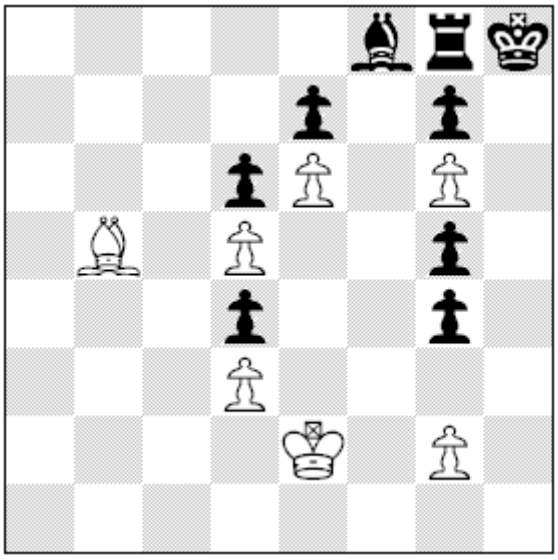
The following position was probably the most complicated I analyzed with many pieces on both sides. PGNdraw deems it to be a live position, basically because helpmate is possible with the white king going to a1. But now the ♘c1 and ♗b1 interferes so that the white king cannot pass to a1. There is a simple solution, let the bishop capture ♘c1 and then the helpmate becomes available, like this:



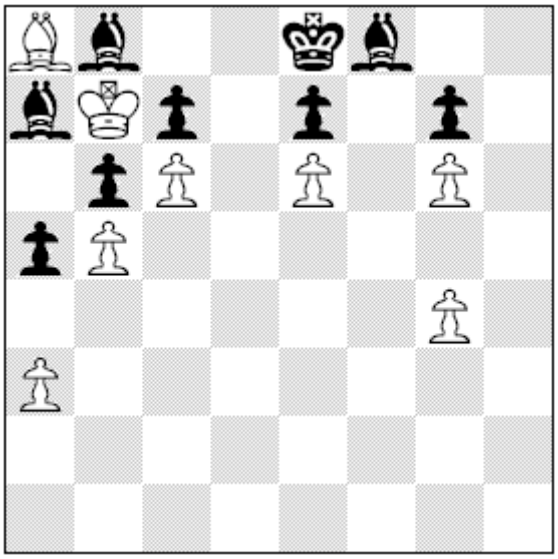
1...♗b2 2.♔e1 ♗xc1 3.♔d1 ♗d2 4.♗c2 ♗c3 5.♔c1 ♗e1 6.♔b1 ♗d2 7.♔a1 ♗e1 8.♗b1 ♗c3#

I recognize that there needs to be a full analysis of legal moves ahead with the aim of creating a helpmate, to solve the following positions. I may introduce it, but at the moment I wonder if it is worth the hassle, since I have not yet seen a single situation from a real game where something like this has occurred:

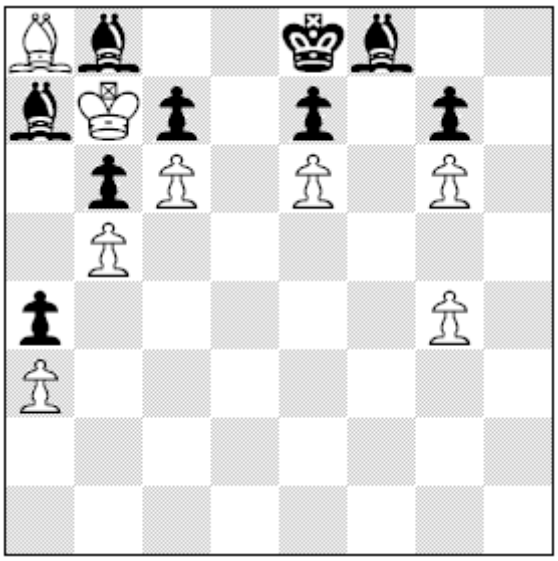
Helpmate is possible, if Black cooperates by not pushing pawns too early, otherwise stalemate will result after ♔xf8. White starts out with 1.♗e8 g3 2.♗f7 g4 3.♗xg8 ♔xg8, then White captures d4, then captures g3 so as to let Black avoid g4-g3 until the last moment, and then finally ♔xf8 g3 ♔xe7 with a winning position, but it can be won by either side.



The Buchanan position, where White can checkmate Black if he cooperates 1...♔d8 2.♔a6 ♔c8 3.♗b7+ ♔d8 4.♗c8 ♔e8 5.♗d7+ ♔d8 6.♗e8 ♔c8 7.♗f7 ♔d8 8.♗g8 ♔e8 9.♔b7 ♔d8 10.g5 ♔e8 11.♔c8 a4 12.♗f7#

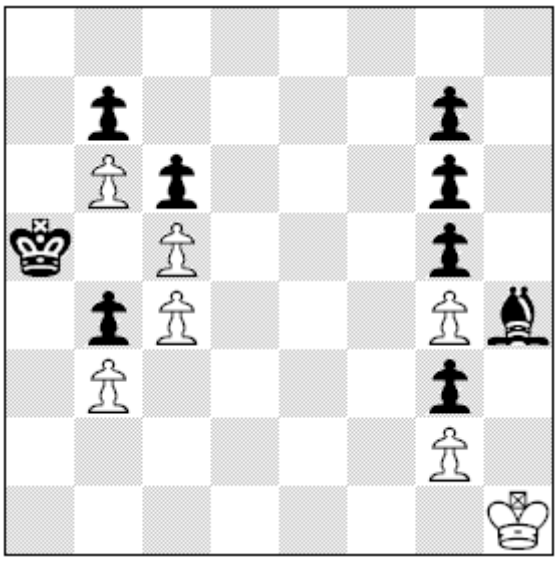


The Buchanan position, where the insertion of a5-a4 makes helpmate impossible, it is a dead position.

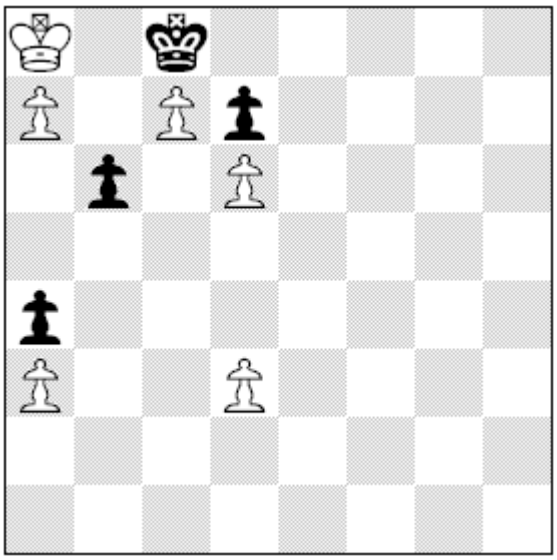


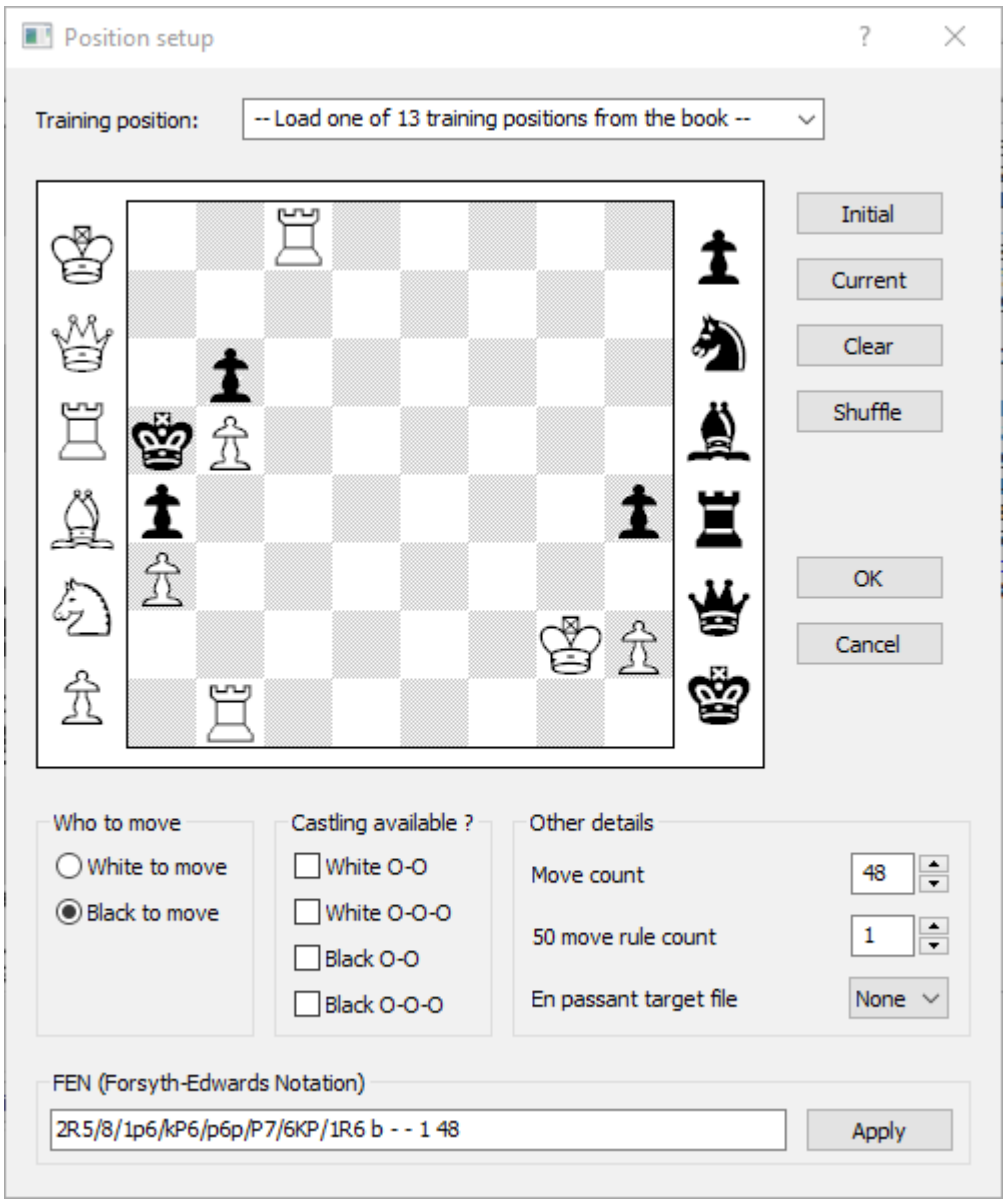
A study most likely, White can checkmate if Black cooperates: 1.♔g1 ♔a6 2.♔f1 ♔a5 3.♔e2 ♔a6 4.♔e3 ♔a5 5.♔e4 ♔a6 6.♔e5 ♔a5 7.♔e6 ♔a6 8.♔f7 ♔a5 9. ♔xg6 ♔a6 10.♔f7 ♔a5 11. ♔e7 ♔a6 12.♔d7 ♔a5 13. ♔c7 ♔a6 14.♔b8 ♔a5 15. ♔xb7 g6 16.♔xc6 ♔a6 17. b7 ♔a5 18.b8♕ ♔a6 19.♕b6#

Helpmate for Black is also possible.



A simpler position, there is only one legal move for each player each time, and it leads to checkmate 1.d4 b5 2. d5 b4 3.axb4 a3 4.b5 a2 5.b6 a1♕ 6.b7#





Here there is no question that with Black on the move, the position is already dead. I might find a solution to this in the future. For the PGN analysis this is not particularly interesting, to declare one move before stalemate if this was inevitable. To determine if a loss by time forfeit is correct, this is crucial of course.