THE PUZZLING SIDE OF CHESS

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RETRO WORLD III: TWO LAST MOVES AGO

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Retrograde analysis is the art of backwards thinking. By examining details of the present situation, we deduce past events.

There are various kinds of chess puzzles that involve retro thinking. In a *last move problem*, the task is to determine the move or moves which led to the given position.

When answering the question "What was the last move?", the solver must be as precise as possible. A complete description of a move includes the square a piece moved from, whether a capture was made, and if so, what type of piece was taken.

All six problems in this column ask you to figure out the last two moves. In every case, both moves are exactly determined with regard to departure squares and captures.
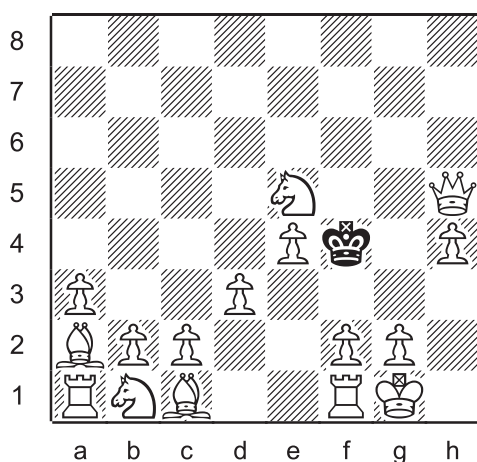
Retro 17
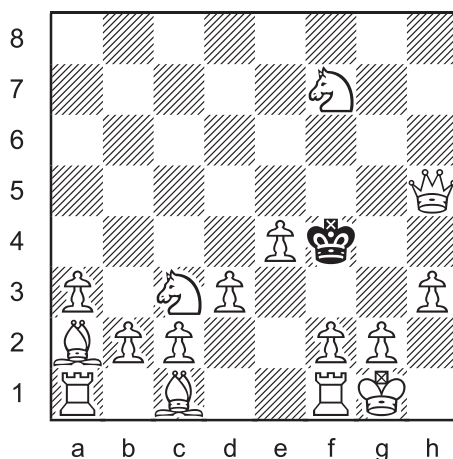
What were the last two moves?

In *last move* problems, moves are counted separately for White and Black. "Last two moves" means one turn by each side (W-B or B-W).

Solutions are written in long algebraic notation, giving departure and destination squares. If there is a capture, the type of piece taken is indicated in parentheses.

Assume that the puzzle positions are legal, even if the piece placement is strange. A chess position is legal if it could be reached in a game played with normal rules. Strategy is not a requirement.
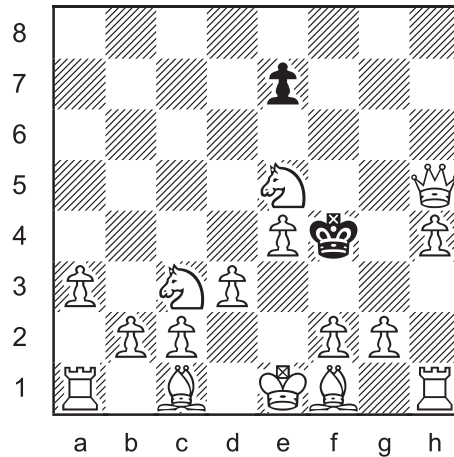
Retro 18

What were the last two moves?

For retro problems 1-16, see columns 30 and 42 in the archives.

Retro 19

What were the last two moves?

In the next three positions, the black king and other black pieces are on the far side of the board "inside the white pawn formation". As you would expect, explaining how they got there is a necessary step in deducing the solution.

Can you solve *The Case of the Wily Rooks*?
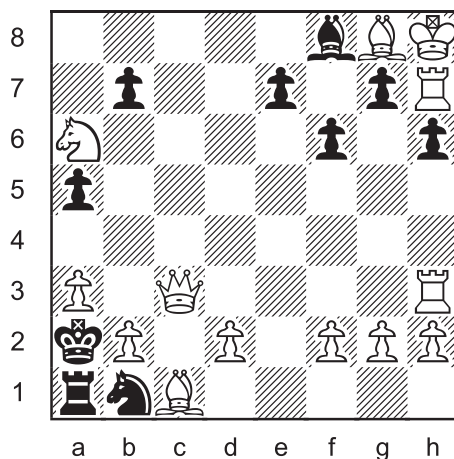
Retro 20
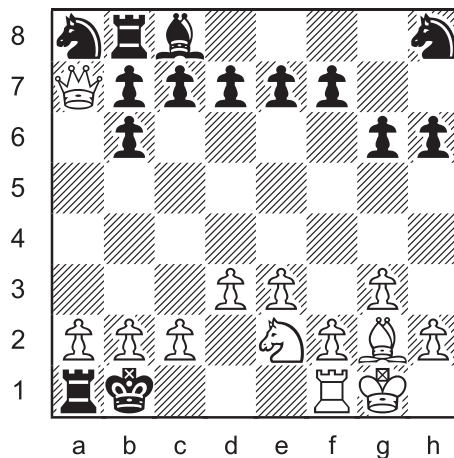
What were the last two moves?

The following masterpiece is by Russian retro specialist Nikita Plaksin (1931 -). In this position, White also has pieces behind the opponent's pawns.
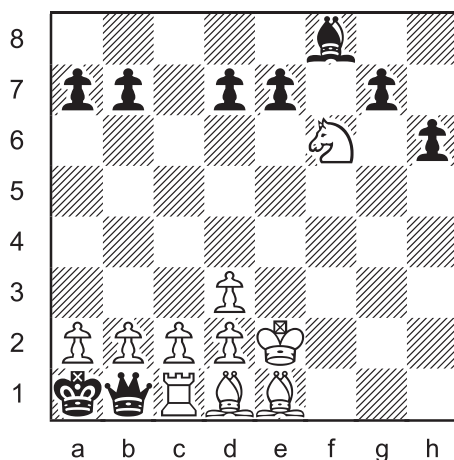
Retro 21

What were the last two moves?

In our final problem, by Ukrainian composer Filip Bondarenko (1905-1993), the stipulation asks for the last two moves, but it will be necessary to go back at least four moves to discover the solution.

Unlike the earlier positions, neither king is in check. Figuring out which side just moved is part of the puzzle.

Retro 22

What were the last two moves?

SOLUTIONS

Retro problems 17,18,19, 20 by J. Coakley, The first three are from *Winning Chess Puzzles For Kids Volume 2* (2010). Number 20 is a *ChessCafe.com* original (2014).
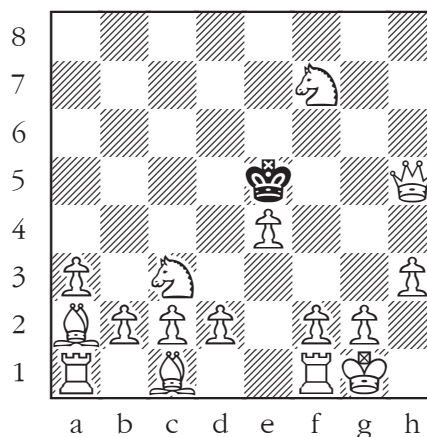
PDF hyperlinks. You can advance to the solution of any puzzle by clicking on the underlined title above the diagram. To return to the puzzle, click on the title above the solution diagram.

Retro 17
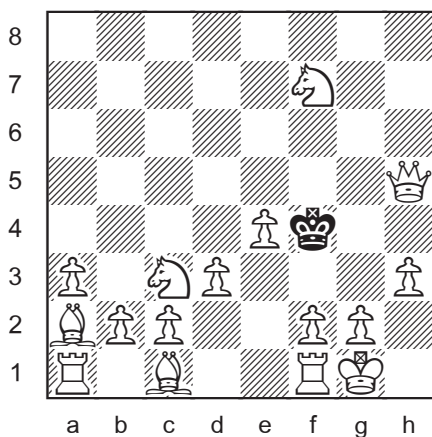
Last two moves:
1...Ke5-f4 2.d2-d3#

Position two moves ago

A simple problem to get things started.

Black is in check from the white bishop at c1. But the last move was not by the bishop because it could only have moved to c1 from d2 or e3, where it would already be checking the black king. *It cannot be White's turn if Black is in check*. So the last move had to be the discovered check 2.d2-d3#.

The previous move by Black was not a king move from g4, g5, or f5 because he would be in an impossible double check on those squares. The previous move had to be 1...Ke5-f4. This move was not a capture because all sixteen white pieces are still on the board.
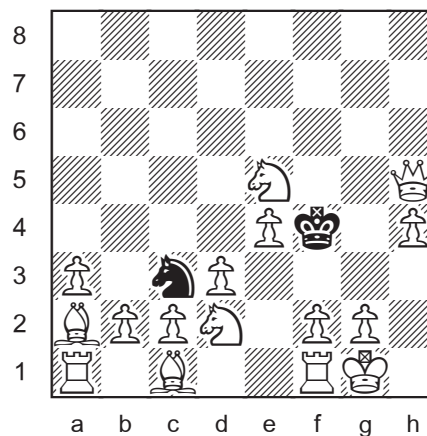
On e5, the black king was in double check. The preceding white move was 1.Ng5>f7+. That move may or may not have been a capture (as indicated by the symbol >).
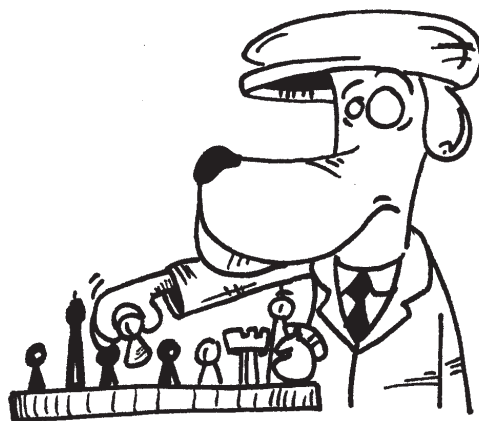
Retro 18
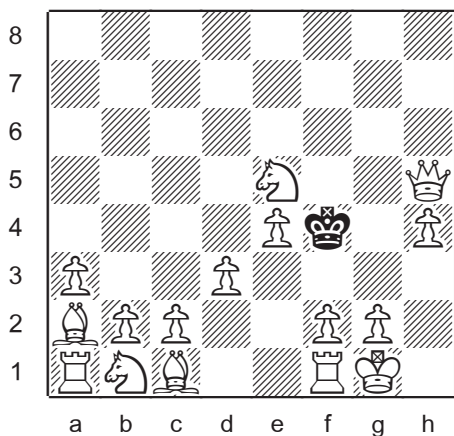
Last two moves:
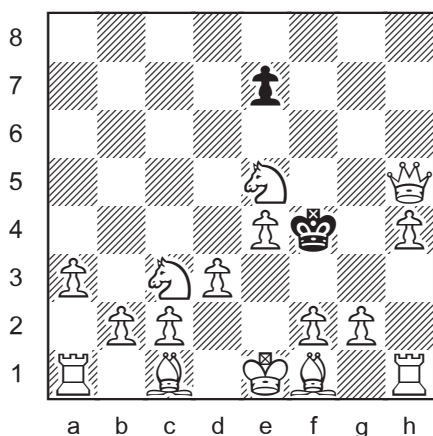1...Nc3-b1 2.Nd2xb1(N)#

Position two moves ago

As in the first problem, the last move had to be a discovered check by White. However, it was not 2.d2-d3# because Black would not have a legal move on the previous turn, a situation known as *retro-stalemate*. The black king could not move from g4, g5, or f5 because he would be in an impossible double check on those squares. Therefore, the last move had to be the other possible discovered check 2.Nd2>b1#.

In the position before 2.Nd2-b1#, with a white knight on d2 and b1 vacant, there is still no legal move for the black king on the previous turn. That means that the last black move had to be by a piece that got captured by the white knight on b1. The only possibility is 1...Nc3-b1. That move was not a capture because White has sixteen pieces on the board.
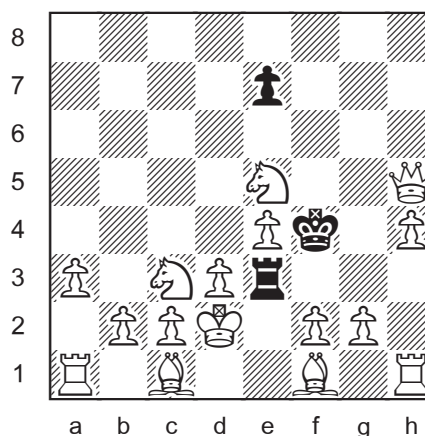
Retro 19

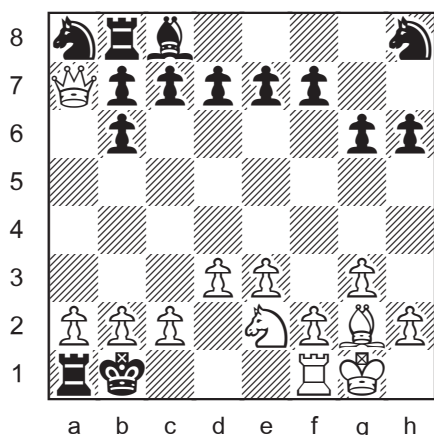Last two moves:
1...Re3-e1 2.Kd2xe1(R)#

Position two moves ago

As in the first two problems, the last move had to be a discovered check by White, and again, it was not 2.d2-d3# because Black would not have a legal move on the previous turn. The black e-pawn has never moved and the black king could not move from g4, g5, or f5 because he would be in an impossible double check on those squares. The last move had to be the other possible discovered check 2.Kd2>e1#.

With the white king on d2, there is still no legal move for the black king on the previous turn. So the last black move had to be by a piece that got captured by the white king on e1.

A black knight did not move to e1 because it could only come from f3, and the white king would be in check (with Black to move). A black queen did not move to e1 because it could only move there from d1, e2, or e3, and the white king would already be in check. A black pawn did not move from e2 to e1 because the only black pawn that could get to e2 without making a capture is the e-pawn and it is still on e7. No other pawn could make a capture to reach the e-file because all sixteen white pieces are on the board. The only other possibility is 1...Re3-e1.

Retro 20

Last two moves:

1...h7xg6(R) 2.Nc1-e2#
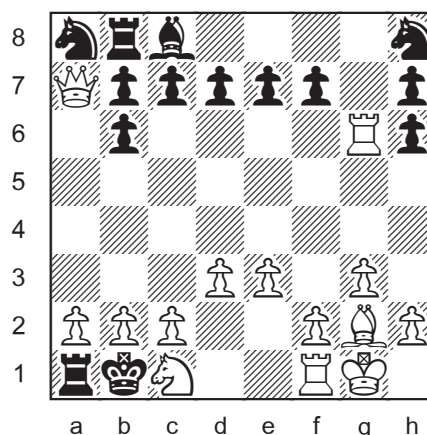
Position two moves ago

This problem is a distant cousin of *Who's the Goof?* puzzles 20-23 from column 43.

Let's begin our investigation by gathering some facts from the position.

a) The black king is in check. So the last move was either castling 0-0+ or discovered check by Nc1>e2+.
b) White is missing three pieces (RBN). Black is missing two pieces (QB).
c) The only way that the black rook on a1 could have escaped from behind the black wall of pawns is if Black played ...gxh6 and ...hxg6. These two captures would temporarily open a file.
d) Since Black also captured on b6, that accounts for all the missing white pieces. They were captured on b6, g6, h6.
e) The only way that the black rook on a1 could have gotten inside the white wall of pawns is if White played dxe3 and exd3. These two captures would temporarily open a file. That accounts for both missing black pieces. They were captured on d3 and e3.
f) The pawn captures on d3 and e3 also explain how a white rook escaped from behind the white wall of pawns.
g) The black king could only have reached the 1st rank through f3 or h3. His subsequent path to b1, whether through e2 or g2, required the white king to get out of his way. Since the white king moved earlier, the last move was not castling,

Therefore, we can conclude that the last move was the discovered check 2.Nc1-e2+. This move was not a capture because the two missing black pieces were taken on d3 and e3.

Now consider the position with the white knight on c1.
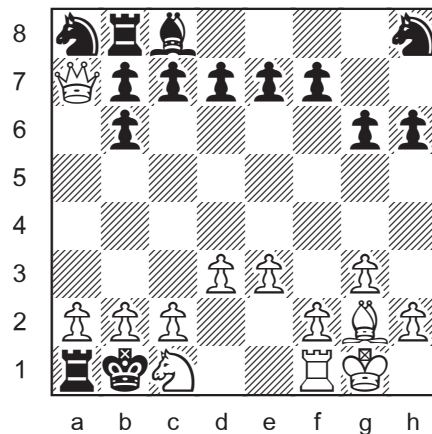
h) The only black pieces with any "reverse mobility" are the g-pawn and h-pawn. So the previous black move was either ...gxh6 or ...hxg6. One of those two moves was played much earlier to free the black pieces (QBR) from the 8th rank.

i) If ...hxg6 was played first (before ...gxh6), then it would be impossible for the black knight to reach h8.

Therefore, we can conclude that the previous black move (before 2.Nc1-e2+) was 1...hxg6. The only question remaining is which type of piece was captured on g6.

j) White is missing three pieces (RBN). The rook and bishop could only escape from behind the white wall of pawns after White captured on d3 or e3.

k) Black is missing two pieces (QB). The queen and bishop could only escape from behind the black wall of pawns and be captured on d3 or e3 after Black captured on h6.

l) Since the capture on h6 had to occur before the white bishop or rook could escape, the piece captured on h6 had to be the white knight.

m) The missing white B is a dark-square bishop. It could not be captured on the light square g6. It was taken on b6.

Therefore, the grand conclusion is that the white piece captured on g6 was the rook. 1...hxg6(R)

Retro 21
Nikita Plaskin 1979
Europe Echecs
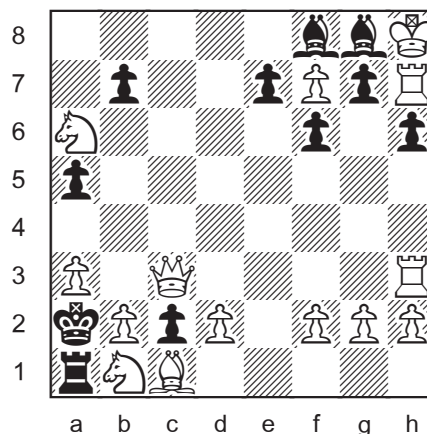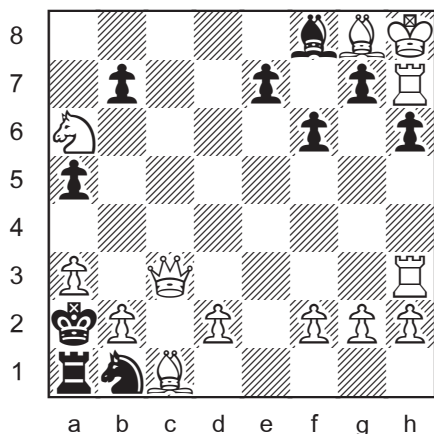
Last two moves:

1...c2xb1(N)=N 2.f7xg8(B)=B+

Position two moves ago

Very clever. A black pawn captures a knight and promotes to a knight. Then a white pawn captures a bishop and promotes to a bishop.

A long argument is needed to show why these moves are exactly determined.

a) Black is in check from the white bishop at g8. The only possible last move is the capture and promotion f7xg8=B+.

b) Because of the black bishop on f8 and the black pawns on e7, g7, h6, we know that the white rook on h7 is a promoted pawn. Otherwise the rook would have no way to reach h7. For a similar reason, we also know that the black rook on a1 is a promoted pawn.

c) White has thirteen pieces on the board. Since the bishop on g8 and rook on h7 are promoted pawns, the missing pieces are the original rook from a1, the original light-square bishop, and a knight (RBN).

d) Black is missing six pieces: both of their original rooks plus queen, knight, light-square bishop, and pawn (QRRNBp).

e) White required six captures to promote twice on g8. For example, e6xf7xg8=R and c4xd5xe6xf7xg8=B. That accounts for all the missing black pieces.

Now consider the position before the last move f7xg8=B+, with a white pawn on f7 and a black piece on g8.

f) The black piece on g8 cannot be a rook or queen because White would be in an impossible check.

g) The black piece on g8 cannot be a knight because it had no way to get there with black pawns on e7, g7, h6. The move ...f6 was played earlier before a white pawn promoted to a rook on g8 and before the white king went to h8. And of course, the move ...h6 had to be played before the rook went to h7.

Conclusion. The last move had to be 2.f7xg8(B)=B+. Here is the position before that move.
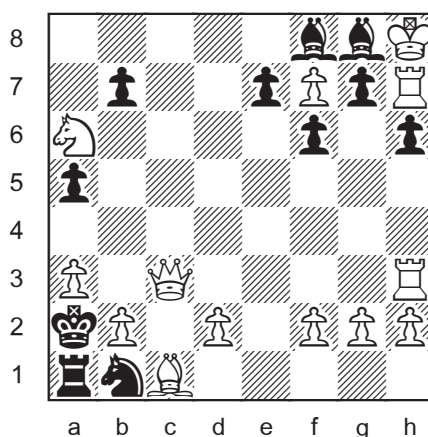
h) Most of the black pieces have "zero reverse mobility". The previous black move was either ...b6xa5, ...Kb3>a2, or ...c2xb1=N.

i) White is missing three pieces. The original white rook from a1 never escaped from its corner prison. It was captured on b1 by a black pawn that promoted to a rook. The other two missing pieces are a knight and the light-square bishop.

j) If the black a-pawn just captured on a5, then it must have captured on b6 earlier (from a7 or c7). However, a5 and b6 are both dark squares, and one of the missing white pieces available for capture is a light-square bishop. So the last black move could not have been ...b6xa5.

k) If the last move were 1...Kb3-a2, then the black king would have been in an impossible check on b3. The white queen could not have captured on c3 (from e5, for example) because all missing black pieces were taken previously by white pawns (en route to g8). But if c3 were vacant, the black king would already be in check from the rook on h3.

Therefore, the previous black move had to be 1...c2xb1=N. We only need to determine which type of piece was captured.

Consider the position before 1...c2xb1=N with a black pawn on c2 and a white piece on b1.

l) The missing white rook was captured earlier by a black pawn when it promoted to a rook, ...c2xb1(R)=R.

m) The piece captured on b1 last turn could not be the missing white bishop because the black king would be in an impossible check.

Therefore, we can conclude that the preceding black move was 1...c2xb1(N)=N since a knight is the only other missing white piece. The missing white bishop was captured earlier by the black d-pawn (...d3xc2, for example).
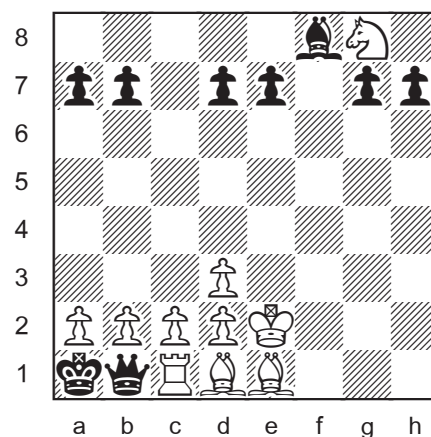
Retro 22
Filip Bondarenko 1963
Europe Echecs
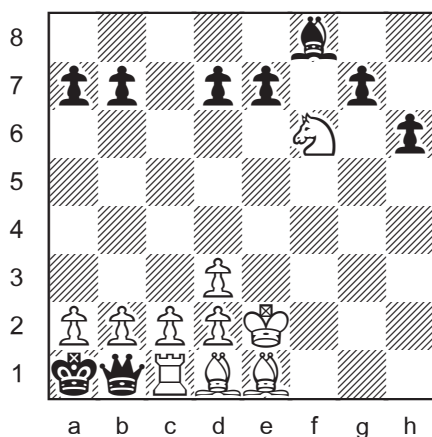
Last two moves:
1...h7-h6 2.Ng8-f6

Position two moves ago

To solve this problem, it is necessary look back **four** moves. The last two moves can be exactly determined. The two earliest moves are partially ambiguous.

Last four moves: 0...Rh8>g8 1.Nxg8(R) h7-h6 2.Ng8-f6

The most important clues to unravelling this mystery are the white pawn on d3 and white bishop on e1.

a) Because there are unmoved pawns on b2 and d2, we can deduce that the bishop on e1 is a promoted pawn, and that it promoted on either b8 or d8.

b) Black is missing seven pieces (RRBNNpp). Because of the black bishop on f8 and pawns at e7, g7, h6, we know that the black rook from h8 never escaped from its corner. Because of the black pawns at b7 and d7, we know that the black bishop from c8 was captured on c8 (and not by a pawn). Therefore, there are five missing black pieces available for capture elsewhere (RNNpp).

c) One of those black pieces was captured by e2xd3. The other four were captured by the white f-pawn on its way to promotion. For example, f4xe5xd6xc7xb8=B.

In order to prove that White made the last move, we must show that it is impossible for Black to have made the last move.

d) The only black piece with reverse mobility is the h-pawn, and the only possible last move by Black would be ...h7-h6.

e) Now consider that position, with the black pawn on h7. Which previous move by White would give Black a legal move on the preceding turn? The answer is none, because the previous move by White could not be a capture. Four of the missing black pieces were captured by the white f-pawn. The other three were captured on c8, d3, and h8 (or g8). The position is a *retro-stalemate*, and therefore illegal.

Conclusion. The last move was made by White.

f) As explained above, the last move by White was not a capture. Which means that the previous move by Black was ...h7-h6.

So the task is this. Find a white move which gives Black a legal move on the turn preceding ...h7-h6. The black piece that moves on that preceding turn will then be captured by White before Black plays ...h7-h6.

g) The last move was not by the white king, with the idea of a capture on d3 on the previous turn. The variation 0...Nd3 1.e2xd3 h7-h6 2.Kf1-e2 is illegal because a white bishop could not be on d1 with white pawns on c2 and e2.

h) The solution lies with the missing black rook from h8. The only last move by White that allows a capture on the preceding white turn (before ...h7-h6) is Ng8-f6. The earlier capture was Nxg8(R).

So the mystery is solved. The last four moves were 0...Rh8>g8 1.Nxg8 h7-h6 2.Ng8-f6.

The first move by Black, ...Rh8>g8, may or may not have been a capture. The first move by White could have been Nf6xg8 or Nh6xg8. The diagram below shows one of the six possible positions before the last four moves.

(The white knight could also be on h6. The g8 square could also be occupied by a white knight or queen.)
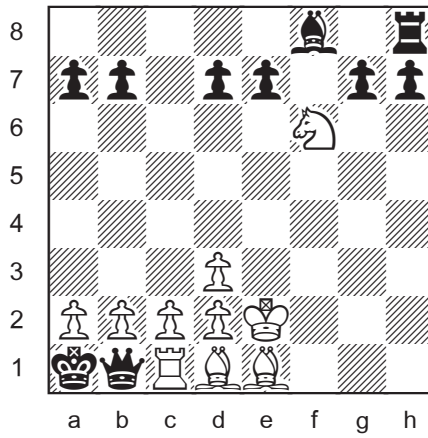
0...Rh8>g8 1.Nxg8 h7-h6 2.Ng8-f6

Until next time!