# Chapter 5

How did we get *here* ?

I have always been fascinated by "retro" problems, where the solver is given a position and has to deduce something about the play which led up to it, and when I was running the *British Chess Magazine* problem column I found that my annual month devoted to such problems attracted as much interest as the rest of the year's offerings put together. Never mind that the "games" must have been wholly unrealistic; it was the logical demonstrations that appealed.

5.1

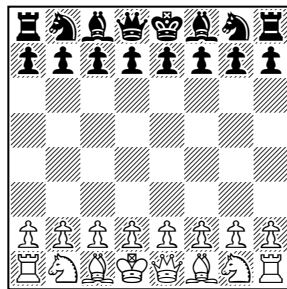

What was White's first bishop move?

5.2
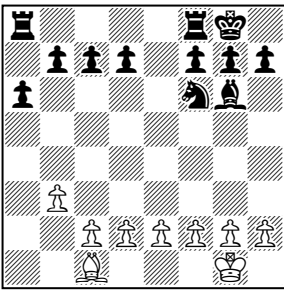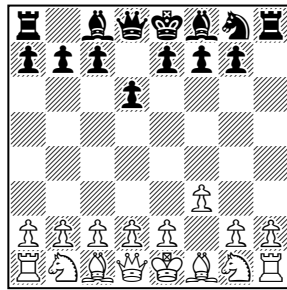
Position after Black's 8th move
What was the game?

Retros come in many flavours. Some, like **5.1**, pose explicit questions as to the nature of the previous play. Some, like **5.2**, require a complete game to a given position (and note that it must be a game to precisely the move stipulated – it is easy to reach **5.2** after White's 7th move, but this is irrelevant). Some require deductions of other kinds (for example, that a king or one of his rooks has moved, so he cannot castle on that side). And so on...
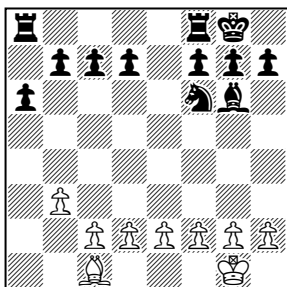
We met ORC in Chapter 4. In **5.3**, White's K and Q have changed places.

5.3

Optional Replacement Chess
How soon can we reach this position?

5.1

What was White's first bishop move?

5.2

Position after Black's 8th move
What was the game?

At first sight, **5.1** seems innocent enough, if we ignore the curious fact that a knight must have been allowed in to capture the bishop originally on f1 (well, funny things happen in retros). However, we then notice that Black's c8 bishop, like White's f1 bishop, must have been captured at home, and hence that the bishop at g6 must be a promoted pawn. Furthermore, it can only have promoted on b1, so it must have captured its way as a pawn from e7 across to a2, captured back to b1, and then escaped as a bishop, all before White's b-pawn blocked the way out by advancing to b3.

If White's c1 bishop had been still at home while all this was going on, only the a-pawn, the a-rook, and the two knights would have been available for the advancing e-pawn to capture: not enough. So White's c1 bishop also must have been captured at home, releasing his queen and his h-rook as additional fodder for the Black e-pawn, and White's first bishop move must have been **b8-a7**.
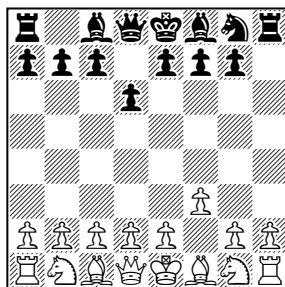
No, it wasn't the b8 knight that was captured, it was the g8 knight, and the b8 knight is now at g8: **1 f3 h5 2 Kf2 Nh6 3 Kg3 h4+ 4 Kxh4 Ng4+ 5 Kxg4 d6+ 6 Kg3 Nd7 7 Kf2 Nf6 8 Ke1 Ng8**.

5.2 remained unpublished for several years, and in the meantime I came across a statement that a gap of more than three moves (two by one side, one by the other) between a uniquely realisable game and the shortest game to the same position was surely impossible. This caused me to produce a position where the gap was four White moves and three Black (from the game array, move White Ng1 to f4, Pf2 to f3, Ph2 off, Ke1 to h2, Black Ng8 to e4, Pf7 to f6, giving a position easily reached after Black's 7th move but reachable after White's 11th only by playing 1 f3 Nf6 2 Kf2 Ne4+ 3 Ke3 f6 4 h4 Kf7 5 Nh3 Kg6 6 h5+ Kxh5 7 Kf4 Kh6 8 Kg4 Kg6 9 Nf4+ Kf7 10 Kh3 Ke8 11 Kh2).

This prompted others to explore the field, and my record was soon beaten :

5.2a (by Hiroshi Nagano)
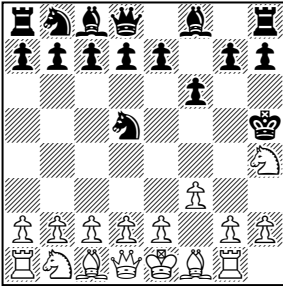
Position after White's 11th move
What was the game?

After Black's 6th move, easy; after White's 11th, only **1-2 Nh4 Nd5 3 f3 f6 4-6 Kg4 Ke5 7 Kh3 Kf4 8 Rg1 Kg5 9 Kg3 Kh6! 10 Kf2 Kh5 11 Ke1**. This is a lovely thing, simple, subtle, and striking. Far from bewailing the loss of my short-lived record, I was delighted to see what I had apparently inspired.
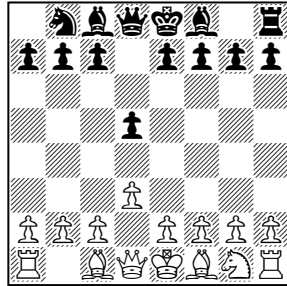
5.3
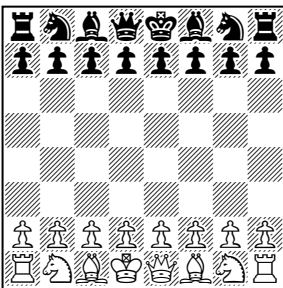
Optional Replacement Chess
How soon can we reach this position?

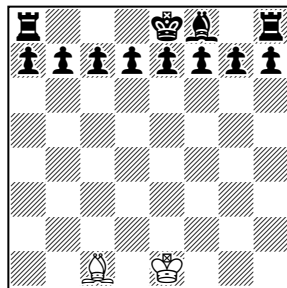In four moves only: **1 e4 Nf6 2 Qf3 Nxe4 (Pe2) 3 Qf6 Nxf6 (Qg8!) 4 Kd1 Nxg8 (Qe1)**.

5.4

Progressive Chess
Position after series 5 (a) as set,
(b) White Pd3 on d4
Where were the missing men captured?

In Progressive Chess, like Losing Chess a game which is widely played, White plays one move, Black two, White three, and so on (so the moves to date have been W, BB, WWW, BBBB, and WWWWW).
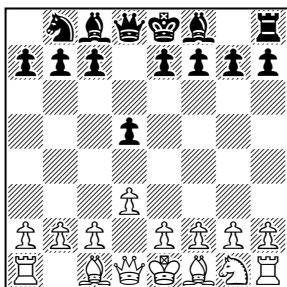
5.5

Maximummer
White to play and win

We met maximummers in Chapter 4. In **5.5**, Black is assumed to have been maximumming from the start.

5.4

Progressive Chess
Position after series 5 (a) as set,
(b) White Pd3 on d4
Where were the missing men captured?

(a) is straightforward, a possible line of play being **1 Nc3**, **2 d5 Nf6**, **3 Na4 Nb6 Nxa8**, **4 Nd7 Nb6 Nxa8 Nb6**, **5 d3 Be3 Bxb6 Be3 Bc1**. Minor variations are possible, but in each case Black's **Ra8** must have been captured **at home**, his **Ng8** on **b6**, and White's **Nb1** on **a8**.

This fails in (b) because the pawn on d4 blocks the bishop's path to b6, and something quite different is needed: **1 Nf3**, **2 Nc6 Rb8**, **3 Nd4 Nxc6 Nxb8**, **4 d5 Nf6 Nd7 Nxb8**, **5 d3 d4 Nd2 Nf3 Ng1**. Again minor variations are possible, but in each case Black's **Ra8** must have been captured on **b8**, his **Nb8** on **c6**, and White's **Ng1** on **b8**. Black's original Ng8 is now at b8, and White's Nb1 at g1; every capture has occurred on a different square.

And why does this fail in (a)? Because White cannot lose a move during series 5; he can play Pd2 to d3 and Nb1 to g1 in four moves, six, or any larger number, but not in five.

5.5
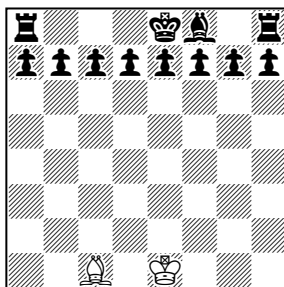
Maximummer
White to play and win

The essence of the argument is as follows: (a) Black's last move must have been with his a-rook, else he would have had a longer alternative; (b) he can never have moved his king in reply to a check, since this check could only have come from a knight, and a pawn capture would have provided a longer alternative; (c) he can never have moved his king other than in reply to a check, nor can he have moved his h-rook, since a knight move or a pawn-two would have provided a longer alternative. So Black **cannot play 0-0-0**, but he *can play 0-0*.

The winning procedure is now clear (force ...0-0, force ...Kh8, mate him). The simplest sequence appears to be **1 Bh6 Rd8 2 Bxg7 Ra8 3 Bd4 Rd8 4 Bxa7 Ra8 5 Bd4 Ra1+ 6 Bxa1 Bh6 7 Be5 Bc1 8 Bxc7 Bh6 9 Bf4 0-0 10 Bd6 Bc1 11-16 Kxb7 Bc1 17-18 Kxd7 Bc1 19 Kxe7 Bh6 20 Kf6 Bc1 21 Bxf8 Bh6 22 Bxh6 Kh8 23 Ke7 f5 24 Kf8 f4 25 Bg7**, and of course there are many alternatives.