



COLUMNISTS

Chess Mazes

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Chess Mazes

Introduction & Brief Overview

[Back to this week's Chess Maze puzzle!](#)

Chess Mazes is chess. The pieces are the same. They move and capture just the same. Check and checkmate are exactly the same. But there is one significant difference. The alternation of moves rule has been suspended. That means only one side gets to make moves. That side is White. Poor Black never gets to make any moves. All he can do is sit back and watch.

As a chess teacher I've tried out various techniques to develop visualization and planning skills for my students. The ideal planning situation is where one side gets to make a plan and carry it through without hindrance or interference from the opponent. How do you do that? Don't let him move.

That's how *Chess Mazes* was born. And without realizing it at the time, I had also invented a new kind of chess puzzle.

To do chess mazes it's assumed that you know:

1. how the pieces move,
2. rules for check and checkmate,
3. chess notation.

If you are not familiar with chess notation, don't worry. You can easily figure out how to decipher it from the examples given. So let's get down to rules. We'll take *bishop mazes* as the sample. This is appropriate since the first maze I ever composed was a bishop maze.

Rules for Bishop Mazes (also Rook & Knight)

Rule Number One:

You are White and your *maze piece* is the bishop. You can move that bishop around the board at will or almost at will. The one restriction is Rule Four. Only the white bishop is allowed to move.

Rule Number Two:

Black gets a king and some pieces, the number of which will vary from position to position. However, none of the black pieces, king included, is allowed to move. This makes Black a passive, stationary, observer. He gets to observe the white bishop as it moves around the board. The one exception is Rule Four.

Rule Number Three:

The game ends when the bishop places the black king in check. That's it. Put the enemy king in danger, put him in check, and the maze is solved. Sound easy doesn't it?

Rule Number Four

You may not place your bishop (*maze piece*) on a square where it is subject to capture by a black unit. You do that, place your guy *en prise*, then Black is allowed to move, take your piece and White loses. You have to start over.

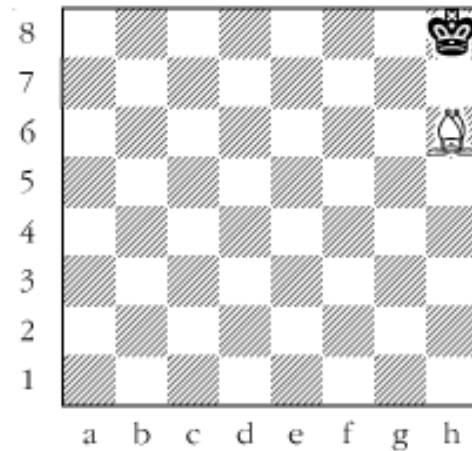
Rule Number Five

We give only the shortest solution in the back of the book. If the maze can be solved in *X* number of moves and it took you *X* plus one, well, you sort of solved it, but not in the most efficient manner. You won't find your solution given.

Bishop Mazes in Action

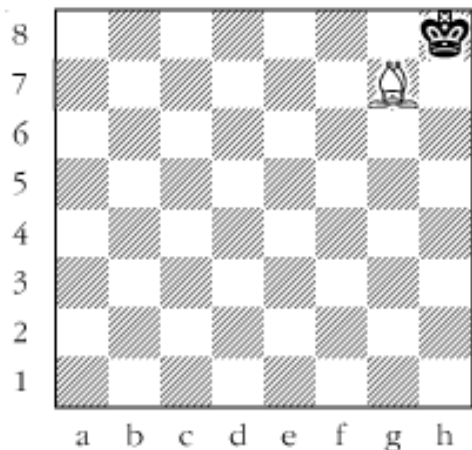
Now that you know the rules for bishop mazes let's see how it works in practice. We begin with sample position number one.

#1



You know what you have to do — put the black king in check. The one move that you may not make is 1. Bh6-g7+ .

#1a



True, the black king is in check and it only took you one move to do it. But you've violated Rule Number Four — you put your bishop in danger, on a square where it can be captured. The black king can just take you off by 1...Kh8xg7. And that you cannot allow.

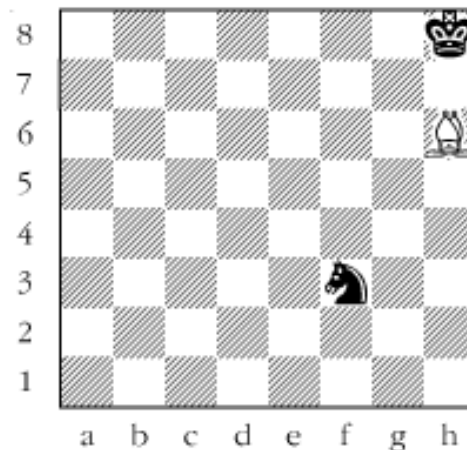
So, what can you do? It turns out that you have no less than five different ways to solve the maze. Here are the solutions:

1. 1. Bh6-g5 2. Bg5-f6+
2. 1. Bh6-f4 2. Bf4-e5+
3. 1. Bh6-e3 2. Be3-d4+
4. 1. Bh6-d2 2. Be3-c3+
5. 1. Bh6-c1 2. Bc1-b2+

But a problem with five correct solutions is not much of a problem. What we're going to do is cut down your options, so there is really only one way (occasionally two) to solve the maze. If you have too many ways out, then it's not a very good maze. So, here is sample position number one with a slight adjustment.

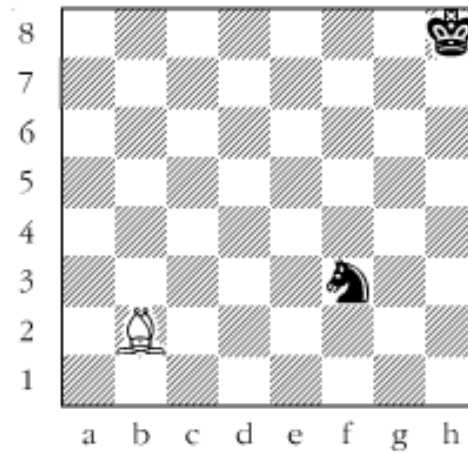
Sample position number two:

#2



By adding the black knight on f3 we've created a whole series of mined squares where the bishop may not go to. We already know about g7, the black king guards it. And the knight takes away g5, d2, e5, and d4. There are other squares as well but we mention only the most critical. That leaves only one solution, namely **1. Bc1** and **2. Bb2+**.

#2a

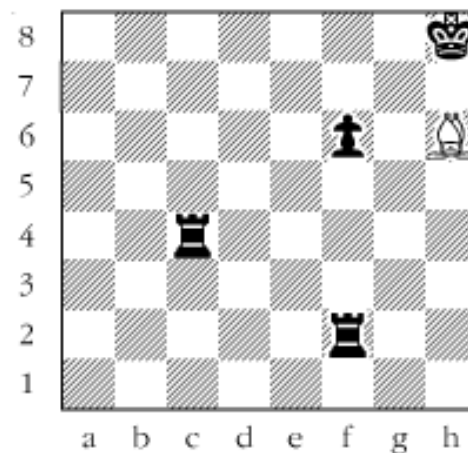


I trust you found it.

And what happens if you used, say, three moves: 1. Bf8 2. Ba3 3. Bb2+. Well, you're on your own in this case, because the only solution given is the one with the fewest of moves, which in this instance is two. Try and get into the habit of doing things in the shortest possible way.

Now look at sample position number three:

#3

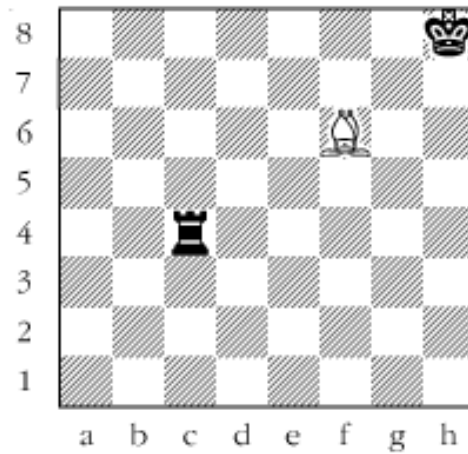


You can also capture enemy guys with your bishop. In fact it is necessary if they stand in your way.

Here, a quick glance at the position tells you that the check must come by taking the f6-pawn, which in turn is guarded by the f2-rook. Both of these enemy units will have to be

eliminated, first the rook and then the pawn. It's done by **1. Be3 2. Bxf2 3. Bb6 4. Bd8 5. Bxf6+**.

#3a



Hope you figured it out.

Solving Bishop Mazes

There are two ways to solve bishop mazes, working forwards and working backwards. In the forward approach the bishop lurches ahead one move at a time until something clicks. It works best when the bishop has only one safe square each move along the way. Then, just by stumbling forward you eventually stumble into the final check which solves the maze.

For optimal results the backward approach seems to work best. Certainly this emphasizes the planning aspect of bishop mazes.

Sample position three, which we just did, shows the backward approach in action. We established right off the bat that the bishop has to give its check by taking the f6-pawn. And we also saw that the pawn is guarded by the f2-rook. This means that the maze has to be worked in two stages, first get the rook and then get the pawn.

Capturing the rook is relatively easy using the most direct route over the e3-square. So stage one is **1. Be3** and **2. Bxf2**. The next stage is to figure out how to get from f2 to f6. The mined

squares which the bishop must avoid are c3, d4, e5, g5, and h4.

That leaves b2, d8, and e7 as the squares which the bishop has to reach. The bishop can reach b2 by the convoluted route 3. Bg3 4. Bd6 5. Ba3 6. Bb2, and it can reach d8 by a more direct method, **3. Bb6 4. Bd8**. Prefer the direct method since it is also the shortest.

To get the full benefit from *Chess Mazes* I strongly urge you to solve the positions directly from the diagrams, without out the aid of arrows or lines or any other devices you may come up with. The diagrams are made nice and clear and large so you can work the mazes in your head just by looking at the diagram position. This is the way to build your visualization skills.

If you are an incorrigible board setter-upper (there are such people – your author is one of them) then by all means set the diagram position up on your board. But don't touch the pieces! Solve the problems in your head.

The Rest of the Mazes

The rules for bishop, rook, and knight mazes are all the same. You'll find further examples in Chapter One. When we get to queen, pawn, and king mazes, some modification of rule three is necessary. Instead of check, you play for checkmate. The details with additional examples are explained in Chapter Two

Application to Real Chess

The planning and visualization skills that come from working on chess mazes appear to me self-evident. There's no need for further elaboration. They translate directly to over-the-board chess and have countless other applications as well. They are universal skills.

So too is seeing what's right under your nose. Unfortunately, many average players have trouble noticing what's staring them directly in the face. How many times have we seen Mr.

Average Player place a piece right in the path of an opposing unit where it can be captured for nothing? All too many times.

And we know from experience that not all such mistakes get punished. Often the opponent (another average player) does not see what's right under his own nose and fails to make the capture. But you do that against an experienced player and he'll take your pieces every time.

That's the reason for rule four. Don't do that. Don't put your pieces *en prise*. Train your eyes to see what's immediately in front of them. See where the enemy forces are striking. Eliminate the silly *en prise* mistakes, and you are absolutely certain to move up a class or two. That's a guarantee.

What about rules one and two, where only White gets to do something and Black must sit back as a helpless spectator? Does this happen in real chess games?

Of course it does. It happens every time one side obtains a huge material or positional superiority. The side with the advantage gets to call all the shots, the side with the disadvantage can only stand by and hope his opponent does not know how to win.

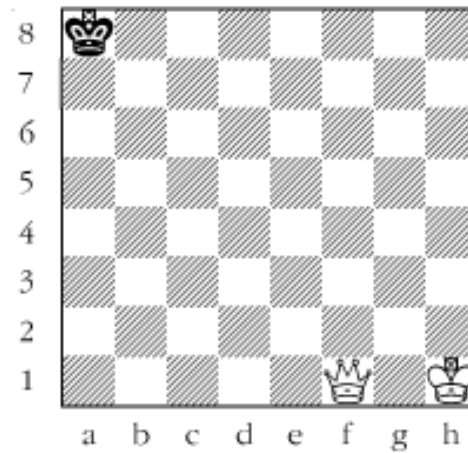
So it come down to this • does the superior side know how to convert his superiority into a win? Let's see some examples from practical play.

Actual Play

Our next position is taken from an endgame played in the East-Penn Jersey Chess League, 1957-1958 season. White has an overwhelming material advantage, an extra queen.

#4

White to Move



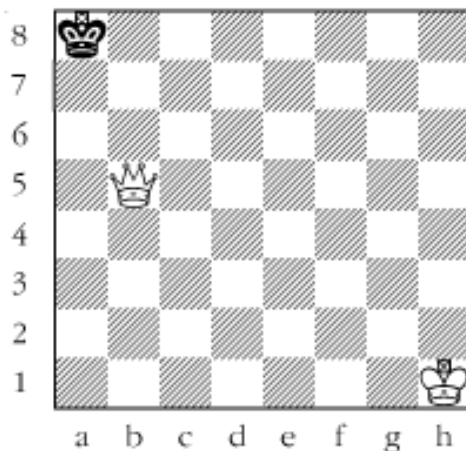
White should win easily if he knows what do. The winning plan consists of three parts:

1. Restrict the movement of black king
2. Advance the white king to its optimal attacking square (c6)
3. Mate with the queen

In the game White displayed perfect knowledge of the technique required.

The first move was **1. Qb5**,

#4a

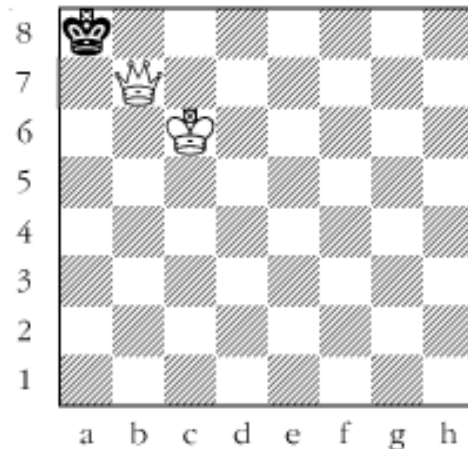


a “cut-off move” which keeps the black king confined to the board’s edge. In fact Black is quite helpless here. All he can do is shift his king back and forth between a8 and a7.

Meanwhile, the white king moves up to c6 in five moves: **2. Kg2 3. Kf3 4. Ke4 5. Kd5 6. Kc6**. At the end black's king stands once again on a8, and White finishes off by **7. Qb7** mate.

#4b

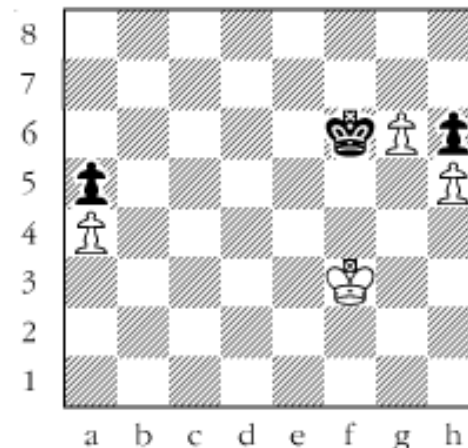
After 7. Qb7 mate



In this example only the white moves proved relevant, black's shuttling king moves counting for nothing.

#5

White to Move

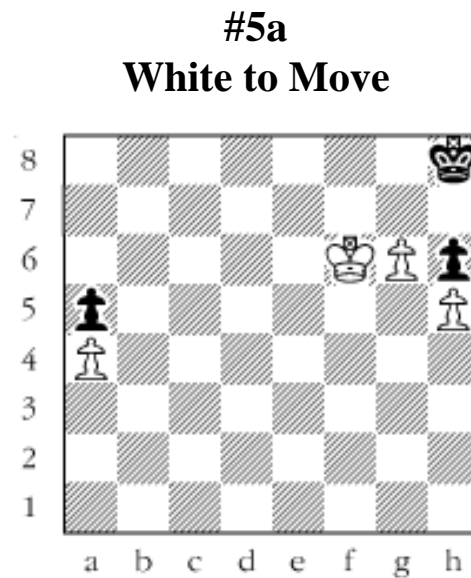


Here is another endgame example from East-Penn Jersey Chess League, fall 1957. Here White's advantage consists of only one extra pawn (at g6) but with correct play it's enough for victory.

The first thing you notice is that the passed g-pawn restricts the movement of black's king which may not play to the d-file or to the fifth rank. If he does that the g-pawn simply marches in to queen. That gives White a free hand for his king to go after the black a-pawn, win it, and promote his own a-pawn.

White's moves would be 1. Ke4 2. Kd4 3. Kc4 4. Kb5 and 5. Kxa5. There's nothing Black can do to stop it. His own king cannot leave the vicinity of the g6-pawn.

In the game White tried plan A, looking to win on the kingside where he has his extra pawn. The play went **1. Kf4 Kg7 2. Kf5 Kg8 3. Kf6 Kh8**, reaching this position:



Here White paused to think. He saw that 4. Kf7 is a draw by stalemate, also that 4. g7+ Kg8 5. Kg6 comes to the same thing.

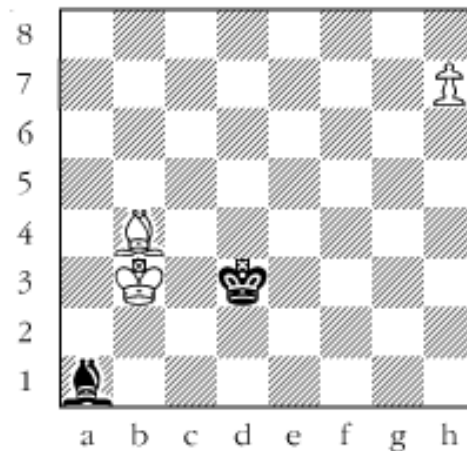
To his credit he switched to plan B and went after the a5-pawn by **4. Ke6 5. Kd6 6. Kc6 7. Kb5** and **8. Kxa5**. The opponent resigned after White got his new queen.

Again we see that only the moves of the winner carry any weight. He either knows how to win or he doesn't.

Finally we come to our rule number five, where we emphasize

that only the shortest and most efficient solution counts. Puttering around with your bishop does not count. Let's see why from our next example (this time not from the East-Penn Jersey Chess League).

#6 Black to Move



Clearly Black is aiming to make a draw. If he can eliminate the white h-pawn he has it, even if he loses his own bishop in the process. That's because White cannot checkmate with a lone king and bishop. It's just not possible to construct a mate with these few pieces. On the other hand if White succeeds in promoting his h-pawn, then he wins.

At the moment the black a1-bishop controls the queening square h8. But the bishop is about to be challenged for control of the long diagonal by white's threat, 1. Ba3 and 2. Bb2. That's bad news.

Moving the king, 1...Ke4, doesn't work in view of 2. Bc3, immediately wresting the diagonal from Black's hands. He has to move his bishop. But where?

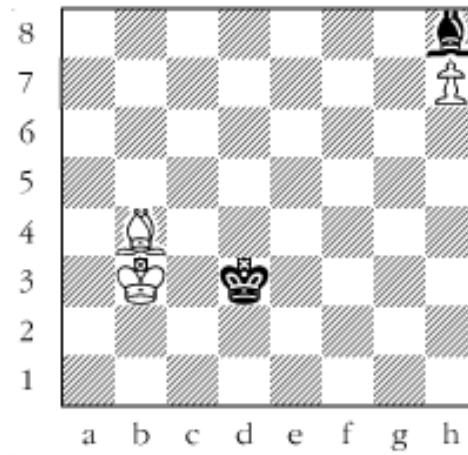
Let's try 1...Bf6 2. Ba3 Ke4 3. Bb2 Kf5 4. Bxf6 Kg6 and we see that Black is one move too late, 5. h8/Q.

Perhaps now you've spotted where the black bishop must go. It can't just be any old square on the diagonal. There is precisely

one square and the bishop must head there immediately.

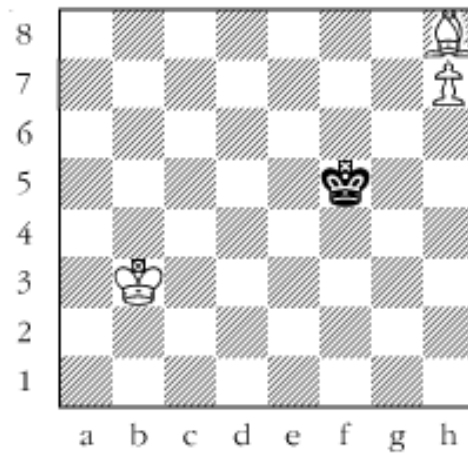
That's **1...Bh8!**:

#6a



Now Black can deal with **2. Ba3 Ke4 3. Bb2 Kf5 4. Bxh8**

#6b



because he has **4...Kg6 5. B-any Kxh7**. The h7-pawn is gone and Black makes his draw.

Precision in the selection of squares and accuracy in timing the moves — that's what rule number five is intended to get across.

The more efficient chess player is also the more successful chess player. He wins positions that might not otherwise be won, and he saves positions that otherwise would be lost.

Develop your sense of timing and you're sure to increase your playing strength by a class or two. Another guarantee.

How else can *Chess Mazes* be used? Some students use mazes before the start of a tournament round. Working through a handful of mazes gets the mental juices flowing, so that when you sit down to play the game you're already in gear.

And you don't have to have any ulterior motive at all. You can chuck all the self-improvement reasons and just do mazes for the fun of it.

I certainly had fun composing *Chess Mazes*, and then had fun solving them. Fun is good.

Bruce Alberston

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