

8 Zugzwang

Let me start with a definition: ‘*zugzwang*, a German word, now anglicised, for a position in which whoever has the move would obtain a worse result than if it were the opponent’s turn to play ...’ (The Oxford Companion to Chess, Hooper & Whyld).

Zugzwang is a very important element of the endgame. By contrast, in the middlegame such situations are rare; and in the opening, where every tempo is vital to accelerate development, it would be hard to imagine a situation where zugzwang occurs. Having the move is an advantage! The concept of zugzwang is foreign to the opening and middlegame, but with heavy piece exchanges, the course of the game changes.

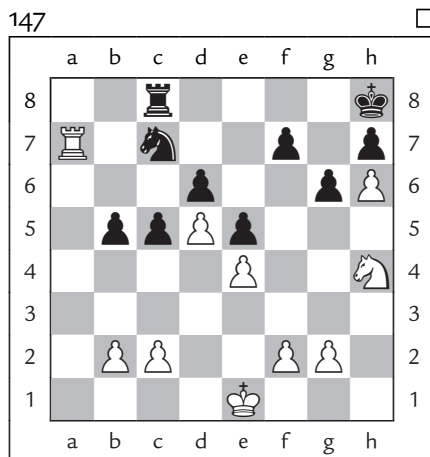
In his classic book ‘Common Sense in Chess’ Emanuel Lasker describes ‘the three elements that give the endgame its character: the offensive power of the king, the passed pawn and zugzwang. Play in the endgame changes so much, that the player’s mental attitude must also be different. A player cannot reckon with massive effects, he becomes more moderate and works with small values. His attacks are no longer great conceptions ... but are more concerned with the exertion of pressure on the enemy pieces, cramping them, and thereby robbing them more and more of their mobility, till finally zugzwang occurs and the defence breaks.’

* * *

(Diagram 147)

White has a clear advantage: the rook on the seventh rank is so strong that it ties up two enemy pieces. Only Black’s king can move. All White has to do is bring the knight into play.

Artur Yusupov – Egon Brestian Schallaburg 1998



30. ♖f3 Threatening ♗g5.

30. ... f6 31. g4

White wanted to continue with g4-g5.

31. ... g5

Or 31. ... ♔g8 32. g5 ♖f7 33. ♖f1, followed by ♔g2-g3-g4, gxf6 and ♗g5.

32. ♗d2 ♔g8 33. ♗f1 ♖f7 34. ♗g3!!

This is more precise than 34. ♗e3 ♖e7 35. ♗f5+ ♔d7, and Black can unpin himself with ♖a8.

34. ... ♖e7 35. ♗h5 ♖f7

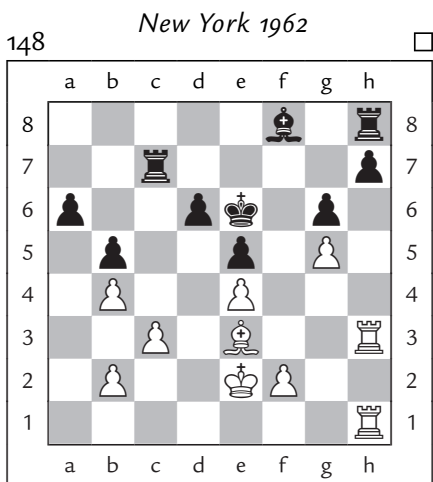
Now Black’s king must also assist in defence by protecting the pawn on f6.

36. ♗g7

And Black resigned. If 36. ... ♔g6, then 37. ♗f5! +-. And after 36. ... ♖e7 there follows 37. ♗e6 and Black is in *zugzwang*. He can still move his pawns for a few moves, but then that’s it.

Lasker beautifully described a typical zugzwang position: 'Both sides have each piece & each still mobile pawn in their best, most efficient, attacking & defensive position. The reserves have all been deployed, each piece has its purpose, and it carries out that purpose in its assigned place. But now a move must be made, and that privilege turns into the opposite. Moving will mean giving up the desired position for an inferior one. One would rather not move, but the laws of chess demand & command it without demur. The obligation to move is the reason that the position can no longer be held.'

Robert Fischer – Samuel Reshevsky



Fischer played the endgame so skillfully that his opponent has been left without a decent move: the rooks have to protect the h-pawn, king and bishop cannot move onto the seventh rank, and the rook on c7 has to be ready to protect the pawn on a6 (it has to stay on c7 so that it can protect the a-pawn from c6). There followed a simple waiting move.

30. ♖h4!

Now Black is in zugzwang and has to open the position himself.

30. ... d5

Or 30. ... ♖c4 31. f3 ♖c7 32. ♔f2! and Black has no other move left than 32. ... d5, with a similar position to the game.

31. ♖a1!

Fischer's technique is perfect. 31. e×d5+ ♔×d5 32. ♖d1+ was weaker because of ♔e6 33. ♖d8 ♚g7! With this intermezzo, Fischer avoids this possibility.

31. ... ♖c6

Or 31. ... d×e4 32. ♖×a6+ ♔d5 33. ♖b6+- wins.

32. e×d5+ ♔×d5 33. ♖d1+ ♔e6 34. ♖d8 ♔f5

If 34. ... ♖c7, then 35. ♖a8+- wins.

35. ♖a8 ♖e6 36. ♖h3!

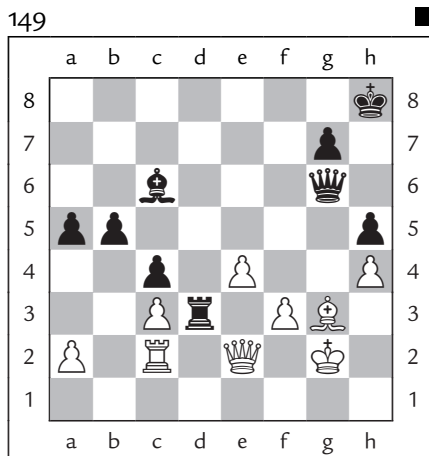
Threatening simply 37. ♖f3.

36. ... ♚g7 37. ♖×h8 ♚×h8 38. ♖×h7 ♖e8 39. ♖f7+ ♔g4 40. f3+

And White won the game.

Svetozar Gligorić – Vassily Smyslov

Amsterdam 1971



Black has the more active pieces and a better king position. Here, zugzwang also leads to a quick win.

41. ... ♖h7! ♘

Every move worsens White's desperate situation.

42. ♖c1

Or 42. ♖h2? ♖×f3 43. ♗×f3 ♘×e4--; 42. ♗e1 ♗f6--; 42. ♖d2 ♘×e4 43. ♖×d3 c×d3!--; 42. ♗f2 ♖×f3--; 42. ♖f2 ♗f6--.

42. ... ♗f6 43. ♘e1

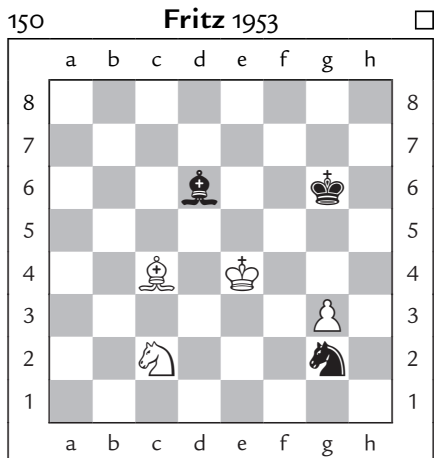
43. ♖d1 ♗×c3-- would be no better.

43. ... ♗f4!

and White resigned because of 44. ♖c2 ♖×f3--.

* * *

Zugzwang plays a central role in the endgame. There is hardly an endgame where the motif does not come into play. Opposition, triangulation and coordinate squares in pawn endgames are the most well-known examples. Positions with reciprocal zugzwang are particularly interesting. This idea is demonstrated in the next study.



The only chance for White to win lies in the poor position of Black's knight.

1. ♖f3 ♖h4+

Black wants to sacrifice the knight for the last pawn and thereby reach a draw.

2. g×h4 ♖h5

At first glance, White must lose the h-pawn. But he hasn't yet exhausted all his tactical resources.

3. ♖e3! ♘e7

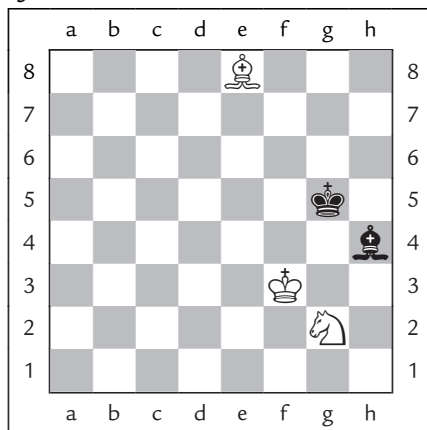
If 3. ... ♖×h4, then 4. ♖f5+.

Now the point of the study: White can no longer save the pawn, but ...

4. ♖g2! ♘×h4 5. ♘f7+ ♖g5 6. ♘e8

and Black is in zugzwang. The final position deserves a diagram.

151



The limited scope of Black's bishop is evident. The king has to protect the bishop, but it too has run out of squares.

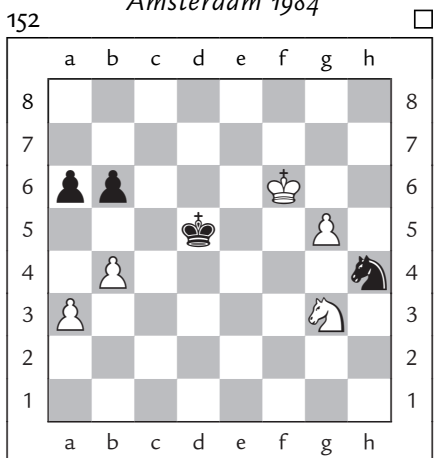
Interestingly enough, it is a reciprocal zugzwang. Black is in zugzwang because of the poor position of his pieces. White is in zugzwang because his pieces are placed *too perfectly*. The knight has to attack the enemy bishop and cover the e1 square, the king

takes away the f2 and g3 squares from the bishop and the g4 square from Black's king. The bishop has to control the h5 square, and it is placed perfectly on e8. If White were to move, 7. ♖f7 would not work because Black's king attacks the bishop and the trap falls apart.

Recognising in good time that a zugzwang position is about to occur is a great skill.

Jan Timman – Hans Ree

Amsterdam 1984



1. a4!

1. ♖f5?! ♜g2 2. ♜e3+? (2. g6 ♖f4 3. g7 ♜h5+) would have been incorrect due to 2. ... ♜×e3 3. g6 ♝d6 4. g7 ♜d5+.

1. ... b5 2. a5

and Black is in zugzwang.

The reason why d5 was the best square for Black's king will soon become evident.

2. ... ♜c4 3. ♖f5 ♜g2 4. ♜e5!

and Black can no longer halt the g-pawn.

* * *

Here are some important criteria that can lead to zugzwang:

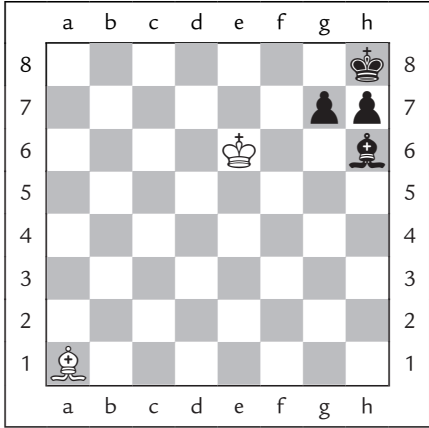
- 1) immobile pieces;
- 2) the position of pieces and pawns are optimal and cannot be improved;
- 3) overloaded pieces.

Zugzwang is an exceptionally useful weapon that should not be lacking from our arsenal in the endgame.

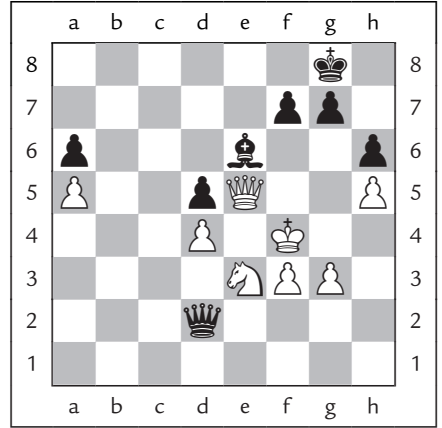


Exercises (solutions p. 147-151)

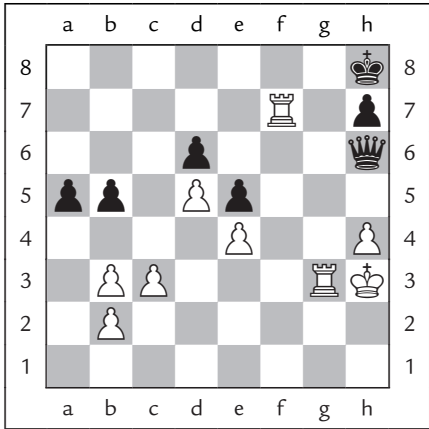
E8-1 * [?]



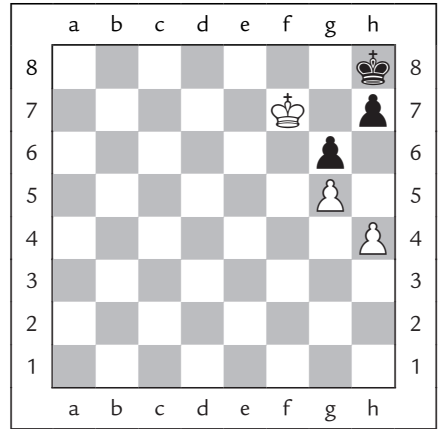
E8-3 * [?]



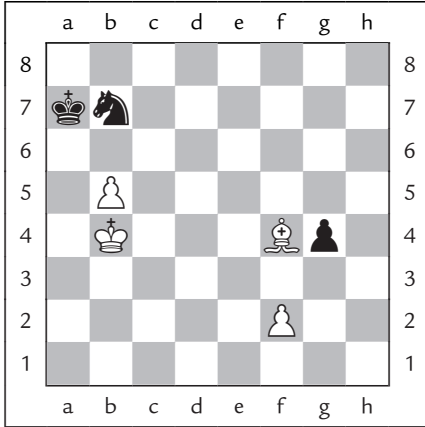
E8-2 * [?]



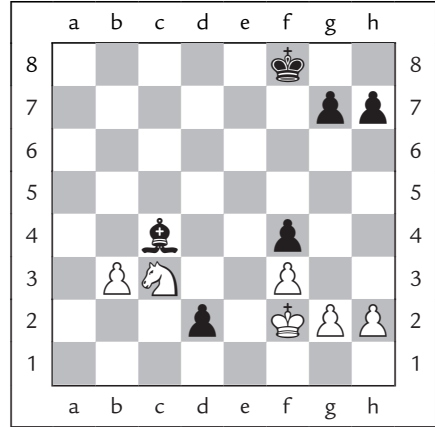
E8-4 * [?]



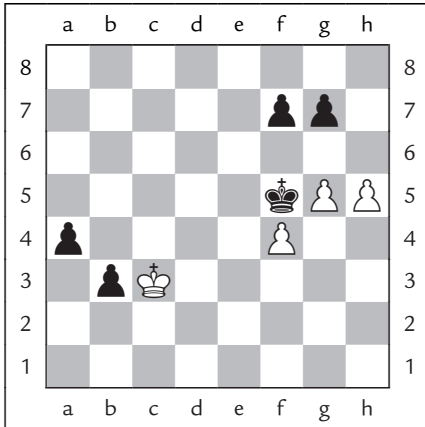
E8-5 * ?



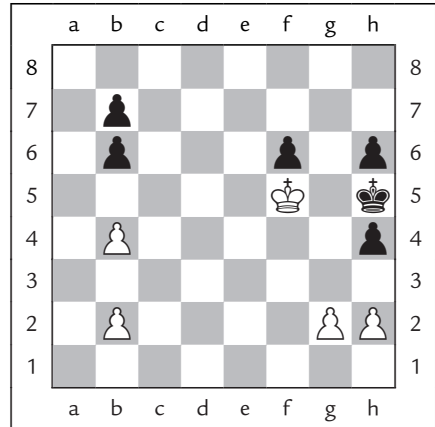
E8-7 * ?



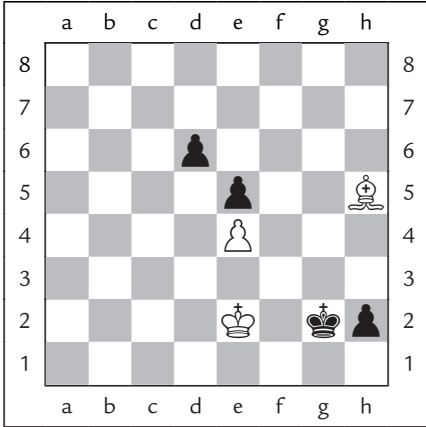
E8-6 * ?



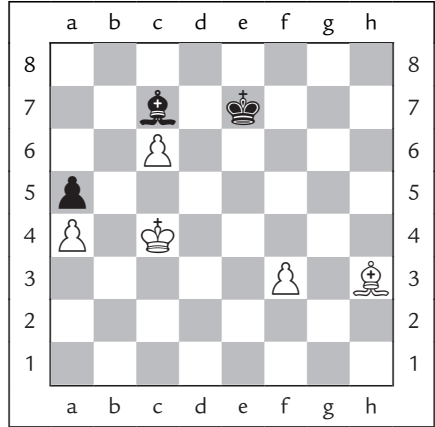
E8-8 * ?



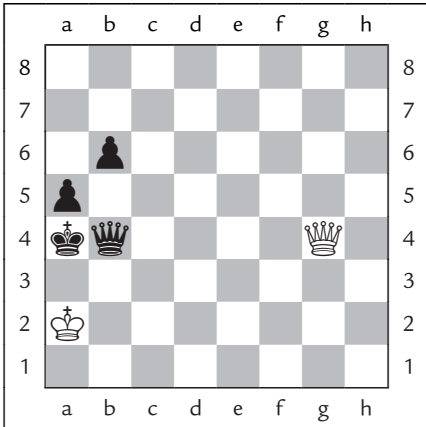
E8-9 ** [?]



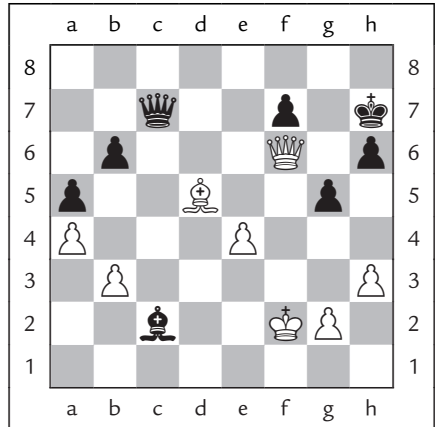
E8-11 ** [?]



E8-10 ** [?]



E8-12 ** [?]



Solutions

□ E8-1

Illustrative example

1. ♔f7 ♘... 2. ♔xg7#1-0.

□ E8-2

Zejbot – Levin, *St. Petersburg 1900*

1. ♖g5 ♘1-0.

□ E8-3

Szily – Balogh, *corr*

1. ... ♔h7 ♘-+ ♘-1 [2. g4 ♖h2#; 2. ♖d6 ♖x4#].

□ E8-4

Illustrative example

1. ♔f8! ♘h6 [1. ... h5 2. ♔f7 ♔h7 3. ♔f6 ♘] 2. h5! ♔h7 [2. ... gxh5 3. g6 +-] 3. ♔f7 gxh5 4. g6 +-.

□ E8-5

Yusupov – Anand, *Linares 1992*

1. ♔c7 +- 1-0 [1. ... ♔a8 2. b6 ♘].

□ E8-6

Gol'berg – Zhuk, *Leningrad 1934*

47. ... ♔e6? Instead 47. ... f6! 48. g6 ♔e6 49. ♔b2 = was necessary. 48. h6! +- gxh6 49. gxh6 ♔f6 50. f5 ♘1-0.

□ E8-7

Pirrot – Yusupov, *German Cup 1992*

32. ... ♔d3 ♘ 33. g3 g5 34. h4 h6 35. hxg5 hxg5 36. gx4 gx4 +- White resigned because of 37. ♖d1 (or 37. ♔g2 ♔e2 38. ♔h3 ♔xf3 +-) 37. ... ♔e7 38. ♖b2 ♔d6 39. ♖d1 ♔c5 40. ♖b2 ♔b5 41. ♖d1 ♔b4 +- ♘-1.

□ E8-8

Moritz Lewitt, 1896

1. b5! h3 2. g4+ ♔h4 3. b3 ♘h5 4. g5! fxg5 5. b4 g4 6. ♔f4 ♘ 7. hxg3#1-0.

□ E8-9

Ercole Del Rio, (1750)

1. ♔f3+ ♔g1 2. ♔h1!! ♔xh1 3. ♔f1 ♘d5 4. exd5 e4 5. d6 e3 6. d7 e2+ 7. ♔xe2 ♔g1 8. d8 ♖ h1 ♖ 9. ♖d4+ ♔h2 10. ♖h4+ ♔g2 11. ♖g4+ ♔h2 12. ♔f2 +- 1-0.

□ E8-10

Ojanen, A. 1943

13. ♖d7+ ♖b5 14. ♖d4+ ♖b4 15. ♖d3 ♘+- b5 [15. ... ♖f4 16. ♖b3#; 15. ... ♖b5 16. ♖a3#] 16. ♖c2+ ♖b3+ 17. ♖xb3# 1-0.

□ E8-11

Baramidze – Smeets, *Pulvermühle 2001*

In order to win this endgame White has to cross the defensive line b8–h2 with one of his pawns. Without both a-pawns the position would be drawn, but here zugzwang helps.

55. ♔c5 ♘d8

If 55. ... ♔f6, then 56. f4! ♔xf4 57. ♔b6 followed by 58. c7, and White wins.

56. ♔d5 ♔e7 57. ♔e4

and Black cannot block the f-pawn.

57. ... ♔f6 58. f4 ♔b8 59. ♔d7 1-0.

□ E8-12

Andersson – McNab, *corr 1992*

1. ♔e2! ♘ [1. ♔xf7? ♔xe4; 1. ♔f3? ♔d1+; 1. g3? ♔b1 2. ♔f3 ♔c2 3. ♔xf7 (3. ♖xf7+ ♖xf7+ 4. ♔xf7 ♔g7 ♖f6-e5) 3. ... ♔d1+ 4. ♔g2 ♖c2+ 5. ♔g1 ♖xe4 =] 1. ... ♔b1 2. ♔f3 ♔c2 3. ♔xf7 ♔d1+ 4. ♔f2 ♖c2+ 5. ♔g1 ♖xe4 6. ♔e6 +- ♖e3+ 7. ♔h1 ♖f4 8. ♔f5+ ♔g8 9. ♖g6+ ♔f8 10. ♖xh6+ ♔f7 11. ♖e6+ ♔f8 12. ♖c8+ ♔g7 13. ♖d7+ ♔f6 14. ♖e6+ Black resigned because of 14. ... ♔g7 15. ♖e7+ ♔g8 16. ♔e6+ ♔h8 17. ♖d8+ ♔g7 18. ♖xd1 +- 1-0.

Score table

N ^o	Points	Your Points	N ^o	Points	Your Points	N ^o	Points	Your Points	
1	1	_____	12	2	_____	23	3	_____	
2	1	_____	13	2	_____	24	4	_____	
3	1	_____	14	2	_____	25	4	_____	
4	1	_____	15	2	_____	26	4	_____	
5	1	_____	16	3	_____	27	4	_____	
6	1	_____	17	3	_____	28	4	_____	
7	1	_____	18	3	_____	29	6	_____	
8	1	_____	19	3	_____	30	4	_____	
9	2	_____	20	3	_____	31	4	_____	
10	2	_____	21	3	_____	32	5	_____	
11	2	_____	22	3	_____				
							total	81	_____

Points	Playing Strength
less than 4 points	beginner
4– 9 points	ELO 800–1000
10–19 points	ELO 1000–1500
20–29 points	ELO 1500–1800
30–39 points	ELO 1800–2100
40–60 points	ELO 2100–2300
61–70 points	ELO 2300–2400
71–81 points	ELO above 2400