

Karsten Müller - Endgame Training

Rook and Minor Pieces
versus
Rook and Minor Pieces



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JBV Chess Books

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Preface

Endgames with rook and minor piece(s) against rook and minor piece(s) occur surprisingly often in practical play. In fact, they are encountered more frequently than the classical pure rook endings that every chess enthusiast knows from textbooks and often considers the 'royal discipline'. All the more remarkable, then, that these complex constellations have so far been treated rather neglectfully in the literature. With the present work, I intend to close this gap.

These endgames are characterized by an enormous variety of ideas, motifs, and transitions. For the various material constellations that arise in practice, however, it is still possible to formulate useful rules of thumb that can serve as a reliable guide. Quite often, these rules can even be extended from the 'rook and minor piece' constellation to 'rook and two minor pieces'. For this reason, I have generally kept to the simpler, established designations when naming the endings, in order to make orientation easier.

One special feature deserves mention: the category '♖ + ♘ versus ♗ + ♘' should be further differentiated depending on whether the side with the knight or the side with the bishop is better. At first glance this approach may seem surprising, since the evaluation of a concrete position is not always immediately apparent and may change in the course of the game. Yet in my training courses over many years, this differentiated approach has proved highly effective. It allows players to understand typical plans, strengths, and weaknesses more clearly, and to assess practical winning chances more realistically.

Interestingly, events often develop completely differently depending on whether the side with the bishop or the side with the knight is playing for a win. Of course, there are borderline cases where even experienced players disagree on whether a position more closely resembles a 'Fischer endgame' or an 'Andersson endgame' – but such cases are surprisingly rare.

In addition, this book also addresses selected examples where each side has two rooks (plus minor pieces). These constellations often retain a distinctly middlegame character, not least because the mating potential is considerably greater and the tactical possibilities multiply.

Each chapter begins with carefully chosen, instructive examples from practical play, thoroughly analyzed and explained. To complement these examples, each chapter is followed by a selection of exercises designed to help you actively check and consolidate what you have learned. I encourage you to try solving these exercises on your own first. Only in this way will you be able, in the long run, to reliably recognize and apply the often decisive subtleties in practical endgame situations. However, if you reach your limits, do not hesitate to study the solutions, as valuable insights can be gained from this approach as well.

I wish you great enjoyment in studying this book and much success in applying your new knowledge in your future games.

Karsten Müller, Hamburg 2025

Chapter 1

♖ + ♘ versus ♜ + ♞

Rules of thumb:

1) No piece type likes passivity, but rooks and knights in particular abhor it, since it drastically reduces their potential. Accordingly, they always strive for activity, and to illustrate this fact, one might say:

Even a light initiative carries great weight!

2) The drawing tendency is much lower than in a pure rook ending.

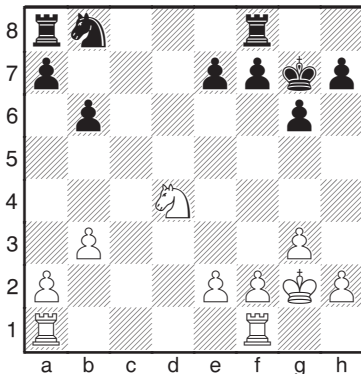
I would like to begin with a complete game to show how the endgame naturally evolves from the opening.



Andersson – Robatsch (A30)

Munich 1979

1.♘f3 ♘f6 2.c4 c5 3.g3 b6 4.♙g2 ♙b7
5.0-0 g6 6.b3 ♙g7 7.♙b2 0-0 8.♘c3 d5
9.♘xd5 ♘xd5 10.♙xg7 ♙xg7 11.cxd5
♙xd5 12.d4 cxd4 13.♙xd4+ ♙xd4
14.♘xd4 ♙xg2 15.♙xg2



Without the knights, the rook ending (with equal material and a perfectly symmetrical position) would of course be a dead draw. With knights on the board, however, it is very unpleasant for Black, because White's strategic initiative cannot be fully neutralized.

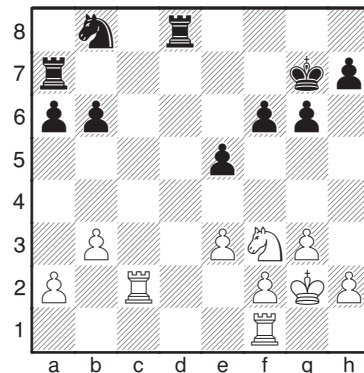
15...a6?!

Already this move (instead of 15...♙c8), which is the beginning of a somewhat artificial maneuver, is a first inaccuracy.

16.♙ac1 ♙a7

The position after 16...♘d7 17.♙c7 ♙fd8 18.♙d1 ♙ac8 19.♙a7 ♙f8 20.♘f3 ♘b8 21.♙xd8+ ♙xd8 22.♙b7 ♘d7 23.b4 is also unpleasant for Black.

17.♙c2 ♙d8 18.e3 e5 19.♘f3 f6



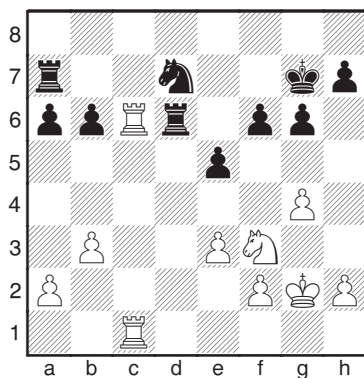
20.g4!?

This typical advance prepares the later activation of the king and the undermining of Black's pawn chain e5–f6 by means of the lever g4–g5.

20...♞d6 21.♞fc1 ♜d7?

21...a5 22.♜d2 f5 was called for and should have been sufficient to hold.

22.♞c6!

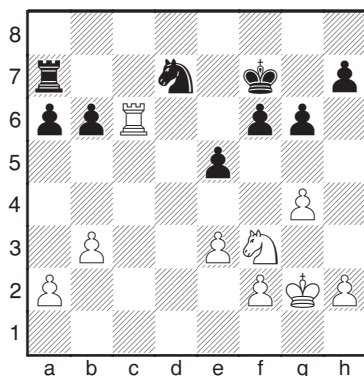


Andersson wants to eliminate Black's active rook.

22...♞xc6

22...♞d5 23.h4 ♞b7 24.g5+–

23.♞xc6 ♞f7

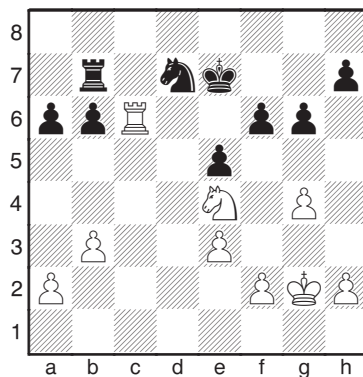


24.♜d2

Now the knight is being transferred to a

better square in the center.

24...♞e7 25.♜e4 ♞b7



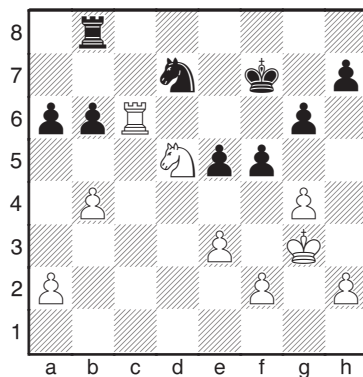
26.b4

Since White has all the time in the world, he can first restrict the black knight even further.

26...♞b8 27.♜c3 f5

27...♞b7 28.♜d5+ ♞f7 29.♞f3 a5 30.b5 ♞g7 31.♞e6+–

28.♜d5+ ♞f7 29.♞g3



29...h5?!

With this pseudo-active advance, Black opens an entry path for the opposing king on the kingside.

In the long run, however, he is lost anyway, as the following sample line shows: 29...fxg4 30.♞xg4 a5 31.b5 a4 32.h4 ♞b7

33.♔g5 ♖g7 34.h5 gxh5 35.♔xh5 e4
36.♔g5 ♜e5 37.♞xb6 ♞f7 38.♜f4+.

30.gxf5 gxf5 31.♞d6 ♞b7 32.♔h4 ♔g7
33.♔xh5 1-0

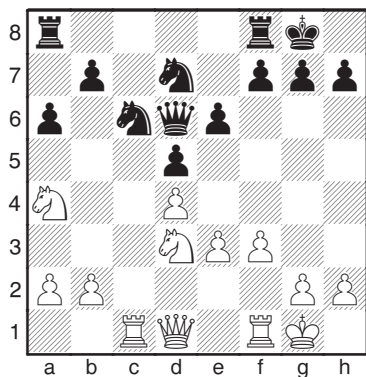
In the following example as well, I will show how the endgame is derived from the opening.



Bruzon Batista – Braun (D10)

Dresden 2008

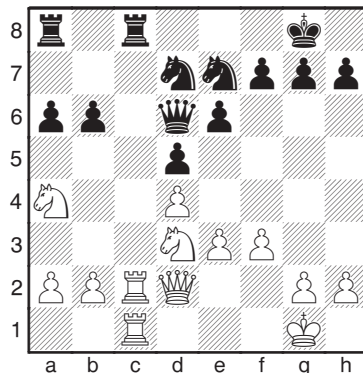
1.c4 c6 2.♞c3 d5 3.d4 ♞f6 4.cxd5
cxd5 5.♞f4 ♞c6 6.e3 a6 7.♞d3 ♞g4
8.♞ge2 e6 9.0-0 ♞d6 10.f3 ♞h5 11.♞c1
♞g6 12.♞xd6 ♞xd6 13.♞f4 ♞xd3
14.♞xd3 0-0 15.♞a4 ♞d7



16.♞d2!

White prepares to double his rooks on the only open file and prevents any possible relief with ♞c6–b4. He is also already planning a strong continuation in case Black removes the knight from c6 in order to fight for the c-file.

16...b6 17.♞c2 ♞fc8 18.♞fc1 ♞e7



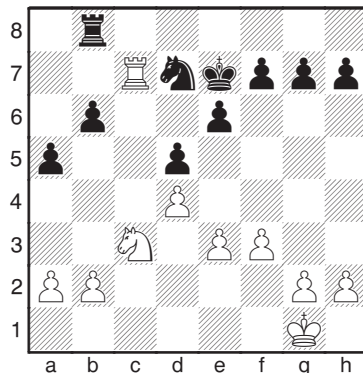
19.♞b4!

The black queen is far more important for the defense than her white counterpart is for the attack. Without queens on the board, Black cannot generate the slightest counterplay.

19...♞xb4 20.♞xb4 a5 21.♞c6 ♔f8
22.♞xe7 ♞xc2 23.♞xc2 ♔xe7 24.♞c7
♞b8

But not 24...♔d6? 25.♞xd7+ ♔xd7
26.♞xb6+ +–.

25.♞c3



25...f6?

The idea behind this advance, to activate the passive rook via the kingside, is too slow.

Exercises

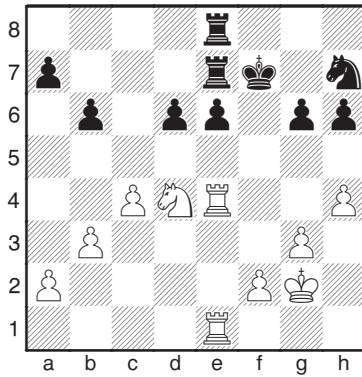
(Solutions starting on page 143)



1

Nuesken – Peschel

Pardubice 2004



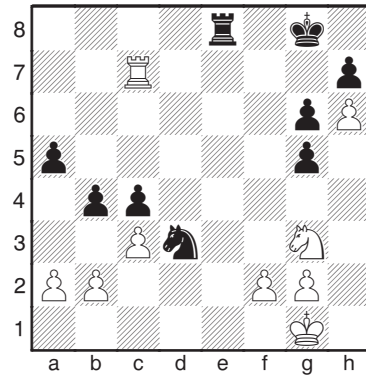
How can White seize his opportunity?



2

Gupta – Meshkovs

German Bundesliga 2023



White to move

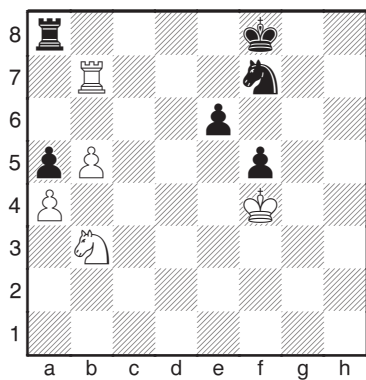
What should be his priority?



3

Sanchez – Czibulka

Budapest 2010



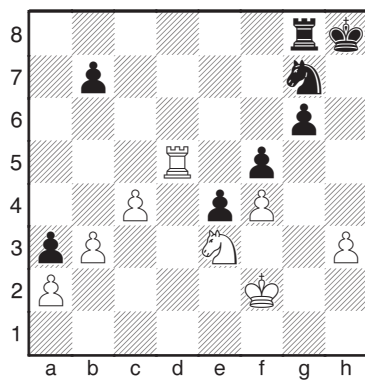
White to move and win



4

Gukesh – Firouzja

Toronto 2024



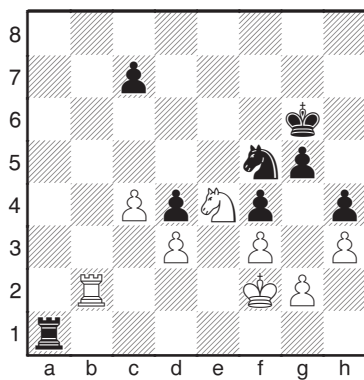
White to move and win



5

Lammers – Van Foreest, L.

German Bundesliga 2023



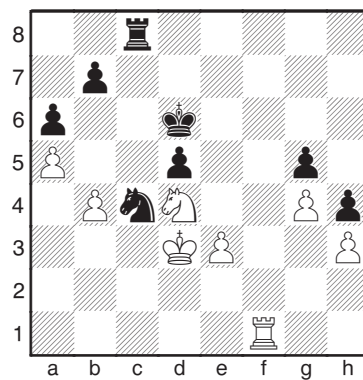
How can Black win?



6

Jussupow – Zhu Chen

Bad Homburg 1998



How should Black defend?

Chapter 2

The ‘Carlsen Endgame’

+ versus + with same-colored bishops

Since this type of endgame has been illustrated with particularly instructive examples by the retired World Champion Magnus Carlsen, it should be called the ‘Carlsen endgame’ in his honor. He has also provided many good examples of endgames with rooks and opposite-colored bishops; however, that material combination was already designated as the ‘Karpov endgame’.

In a ‘Carlsen endgame’, the coordination of rook, bishop and king is very important, and it is also crucial to disrupt the opponent’s coordination.

The following rules of thumb can be formulated for this endgame type:

- 1) To complement his bishop effectively, the attacker will often try to place his pawns on the opposite color squares. Sometimes, however, he applies the opposite strategy and places the pawns on the same color as his bishop, in order to restrict the opponent’s bishop as much as possible and ideally dominate it.
- 2) The drawing margin is quite wide, since the defender can rely on strategies such as exchanging bishops or rooks.
- 3) Space advantage, a superior bishop, harmony of the pieces, and a more active king (‘traditional values’, as GM Christopher Lutz calls them in his book *Endgame Training for Practice*) play a crucial role.
- 4) Activity and initiative are also highly valuable, as blockade structures with rooks on the board can be broken more easily.

Section A

Capablanca's Rule

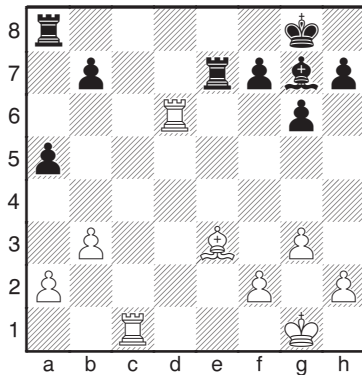
To enhance (or complement) the power of his bishop, the attacker is often well advised to place his own pawns not on the bishop's color, but on the opposite color. On the other hand, he should try to fix the opponent's pawns on the bishop's color – that is, on the 'wrong' squares.

The first example illustrates that 'Capablanca's Rule' also applies when the same-colored bishops are supplemented by other piece types, such as rooks in this case.



Ehlvest – Christiansen

New York 2003



25.a4!

Given his dark-squared bishop, White places his pawns on the queenside on *light* squares – and fixes the weakness on a5 on the color of the bishops.

25...h5

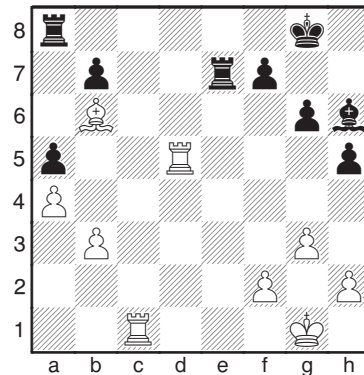
After 25...♙b2 26.♖c2 ♕a3 27.♗d5 ♙b4 28.♙g5! ♖e1+ 29.♙g2 ♖b1 30.♖c7+- (Postny in CBM 95), the white pieces unleash tremendous activity.

26.♗d5 ♙f8

– 26...♖e6 27.♖c7 b6 28.♖b7+-

– 26...♖a6 27.♖cc5+-

27.♙b6 ♙h6



28.♖c7

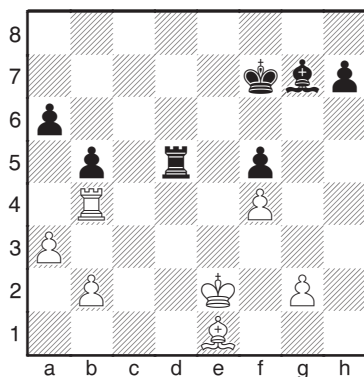
After the exchange of the active rook, the defense is overwhelmed and Black loses material.

28...♖xc7 29.♙xc7 ♖c8 30.♙xa5 ♖c1+ 31.♙g2 ♖c2 32.♙b6 ♙g7 33.♗d8+ 1-0

In the next example, 'Capablanca's Rule' applies in its original form – that is, for the pure bishop endgame with same-colored bishops.



Christiansen, J. – Sindarov
German Bundesliga 2025



38.♙c3?

After this wrong exchange offer leading to a pure rook endgame, White will soon find himself in a cramped position.

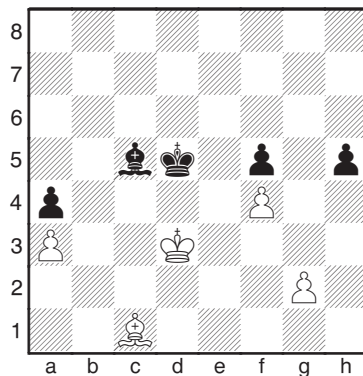
White probably refrained from the correct approach 38.a4! because he feared the sequence 38...♙f8 39.♖b3 bxa4. However, after the subsequent moves 40.♖b7+ ♔g6 41.♙c3, he would have had excellent compensation and could have regained the pawn in the not-too-distant future.

38...a5! 39.♖b3 a4 40.♖b4 ♙f8 41.♖d4 ♙e6

Now, a rook exchange on Black's terms is unavoidable, and the endgame with same-colored bishops is simply lost.

**42.♙d3 ♙d6 43.♖xd5 ♙xd5 44.♙d2 h5
45.♙e3 b4 46.axb4**

46.♙c1 fails to 46...bxa3 47.bxa3 ♙c5.

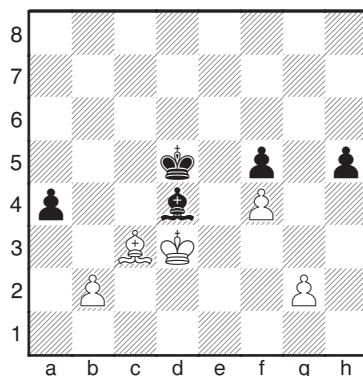


Since the c1–b2 diagonal is too short for the tempo fight, White falls into decisive zugzwang, for example after 48.♙b2 ♙e7 49.♙c1 ♙d6–+.

**46...♙xb4 47.♙d4 ♙d6 48.♙e3 ♙c5
49.♙d2**

49.♙xc5 ♙xc5 50.♙c3 h4–+

49...♙d4 50.♙c3



50...♙c5

Here, the transition to a pawn endgame with 50...♙xc3 also wins – due to a tactical point that becomes clear in the following line: 51.♙xc3 ♙e4 52.♙b4 ♙xf4 53.♙xa4 h4 54.b4 ♙e5 55.♙a5 f4 56.b5

h3 57.gxh3 f3 58.b6, and now 58...♔d6 forces the opposing king to step onto a square where a check can be delivered after 59.♕a6 f2 60.b7 f1♖+.

51.♙e5 ♜b4 52.♙c7 ♙f8 53.♙e5 ♙h6!

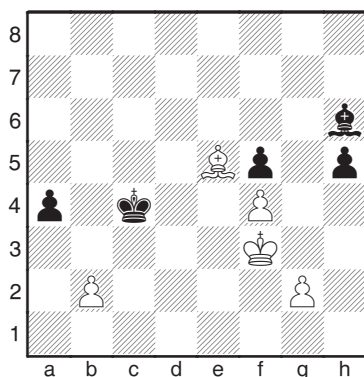
This is necessary to accelerate Black's play on the kingside.

54.♔e3

54.♔c3 fails to 54...♔e4 55.♔b4 ♙xf4 56.♙xf4 ♔xf4-+.

54...♔c4 55.♔f3

55.♙d6 ♙g7 56.♙e5 ♙f8 57.♙f6 ♙c5+ 58.♔f3 ♙d4-+



55...♙f8!

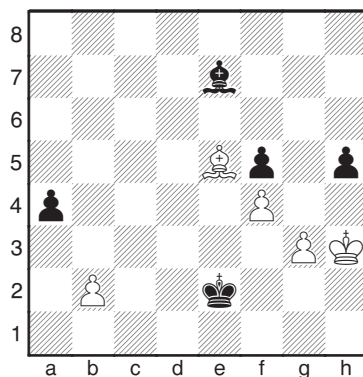
Now the bishop must retreat to prevent the opposing king from breaking through on the kingside.

After the mistake 55...h4?, the sequence 56.♙f6 ♔b3 57.♙xh4 ♙g7 58.g4 fxg4+ 59.♔xg4 ♙xb2 60.♙e7= would lead to equality.

56.♔g3 ♙e7 57.♔h3 ♔d3 58.g3

58.♔g3 ♔e4 59.♔f2 ♙h4+ 60.g3 ♙e7 61.♔e2 h4 62.gxh4 ♙xh4 63.♔d2 ♙g3 64.♔c3 ♙xf4-+

58...♔e2



59.♙d4

After 59.Kg2, the reply 59...h4 proves decisive in the following long sequence: 60.g4 fxg4 61.f5 ♔e3 62.f6 ♙f8 63.♙c7 ♔e4 64.♙d8 h3+ 65.♔g3 ♙d6+ 66.♔xg4 h2 67.♙e7 h1♖ 68.♙xd6 ♖f3+ 69.♔g5 ♖f5+ -+.

59...♔f3 60.♙e5 ♙d8 61.♙g7

61.♙c3 ♙b6 62.♔h4 ♙f2 63.♔xh5 ♙xg3 -+

61...♙b6 62.♔h4 ♙f2 63.♔xh5

63.♔g5 ♙xg3 64.♔xf5 h4-+

63...♙xg3 64.♔g5 ♔e4 65.♙e5 ♙f2 66.♔f6 ♙e3 67.♔g5 ♙c1 0-1

Deadly zugzwang!

Chapter 9

The 'Karpov Endgame' with additional knights

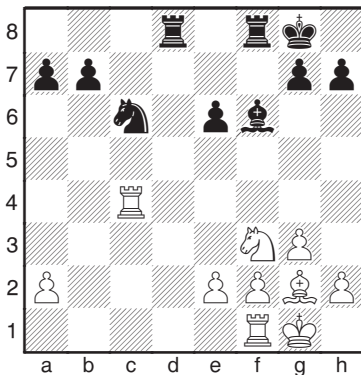
♖ + ♕ + ♞ versus ♖ + ♕ + ♞ with opposite-colored bishops

Opposite-colored bishops favor the attacker, or the side with the initiative.



Jussupow – Spraggett

Quebec 1989



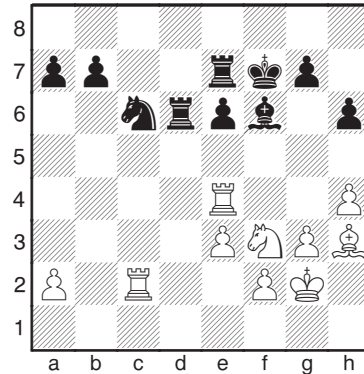
18.e3!

As the attacker, White demonstrates a typical strategy: his pawns restrict the opponent's bishop.

18...♞d6 19.h4 h6 20.♞e4 ♞fd8 21.♕h3! ♕f7

21...e5?! 22.♖g2 ♞d1 23.♞xd1 ♞xd1
24.♕c8± (Jussupow in Chess Informant 47)

22.♖g2 ♞e8 23.♞c1!? ♞e7 24.♞c2



24...b6?

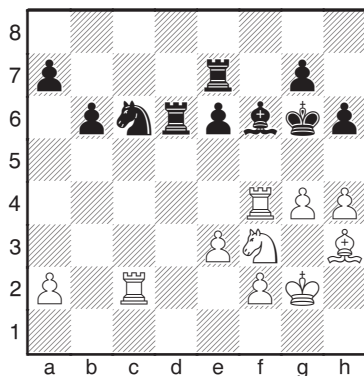
With this serious mistake, the knight loses its secure anchoring. Afterwards, Black is lost, as his entire position falls apart.

After 24...♞ed7, however, he should still have been able to hold.

25.♞f4 ♕g6

25...♖g8 26.♞d2 e5 27.♞fc4 ♞d8
28.♞e4+-

26.g4



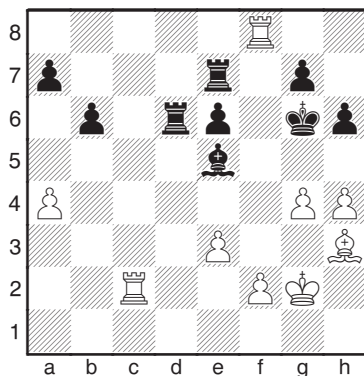
The next attacker approaches.

26...♘a1

After 26...♘e5 27.g5 ♘d3 28.♖e4+–, Black is also lost.

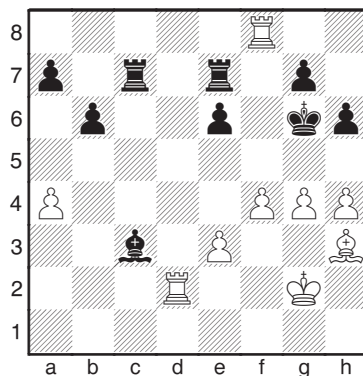
By the way, the consequences of 27...hxg5? 28.hxg5 ♘d3 29.gxf6 ♘xf4+ 30.exf4 and now 30...gxf6 31.f5+!+– or 30...♗xf6 31.♘g5+– would have been particularly drastic.

27.♖c1 ♗b2 28.♖c2 ♘a1 29.a4!? ♘e5 30.♘xe5+ ♗xe5 31.♖f8



White now wins the 'Karpov endgame' thanks to his combined attack on the king and pawn advance.

31...♞dd7 32.f4 ♖c7 33.♞d2! ♗c3



34.♞d6?!

34.♞dd8! was more precise (according to GM Rasmus Svane); e.g. 34...♖f7 35.♞h8

1) 35...♗e1 36.h5+ ♔f6 37.e4 ♗c3 38.♞he8 ♖fe7 39.e5+ +–

2) 35...♖fe7 36.♞df8 ♖f7 37.♞e8 ♖ce7 38.♞eg8 ♖c7 39.g5 ♔h5 40.♔g3 ♗e1+ 41.♔f3 ♗c3 42.♞d8 ♖fd7 43.♗g4+

a) 43...♔g6 44.♞df8 ♖f7 45.h5#

b) 43...♔xh4 44.♞xd7 ♖xd7 45.gxh6 g5 46.♖c8 ♗f6 47.h7 ♖xh7 48.♖c1+–

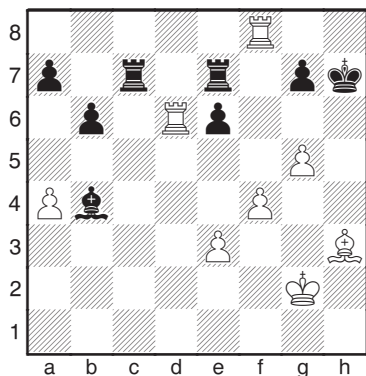
34...♔h7 35.g5 hxg5?!

35...g6 36.♔f3 ♗b4 37.♞dd8 ♗c3 38.♞b8 – 38...h5 39.♞bd8 ♖c4 40.♞fe8+–

– 38...hxg5 39.hxg5 ♗a1 40.♞fe8 ♖xe8 41.♖xe8 e5 42.fxe5 ♔g7 43.e6 ♗b2 44.♞d8+–

36.hxg5 ♗b4?

36...g6 37.♗xe6+–



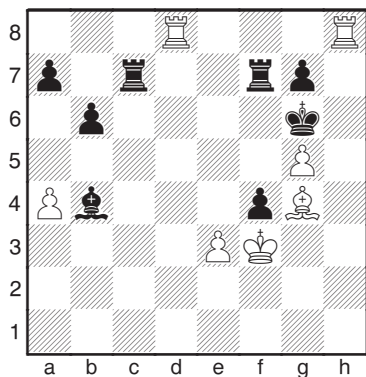
37. ♖dd8?

Probably in time trouble, White misses the fairly simple checkmate after 37.g6+!! ♜xg6 38. ♕f5+ followed by ♖h8# or 37... ♜h6 38. ♕f5 exf5 39. ♖h8#.

37... ♜g6

37...g6 38. ♖h8+ ♜g7 39. ♖h6 ♕c3 40.e4 ♜f7 41.e5+–

38. ♜f3 ♜f7 39. ♖h8 e5 40. ♕g4 exf4



41. ♖d5!

On the second attempt, White finally tightens the mating net.

However, the mundane alternative 41. ♕h5+?! with the possible continuation 41... ♜xg5 42. ♕xf7 ♖xf7 43. ♖d5+ ♜g6 44.exf4+– also wins.

41... ♜xe3+ 42. ♜g3 1-0

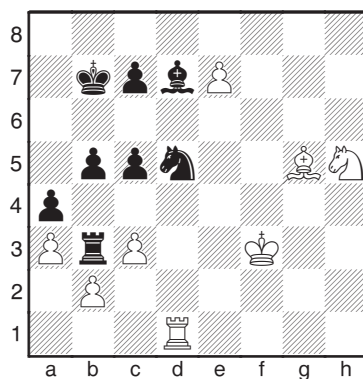
42... ♕e1+ 43. ♜h3+–

In the next example, the defender must be extremely careful in view of a dangerous opposing passed pawn.



Nepomniachtchi – Vidit

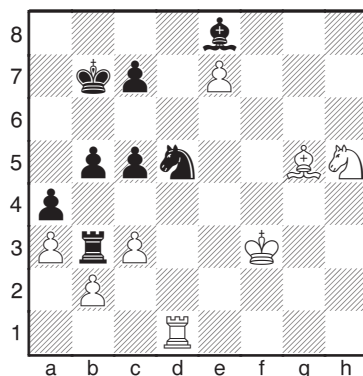
Toronto 2024



36... ♜c6?

Black has no time for a move of his king. With 36... ♕e8! he could have saved the game.

(The additional solution 36... ♕c6= was found by my student Torsten Limbach.)



Chapter 10

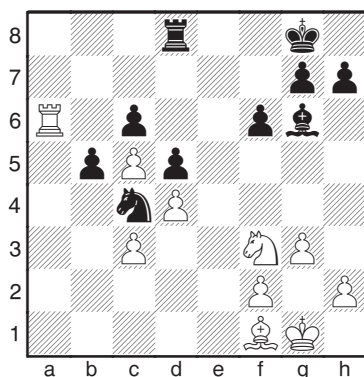
The 'Carlsen Endgame' with additional knights

♖ + ♘ + ♞ versus ♖ + ♘ + ♞ with same-colored bishops

In this material constellation, the so-called 'traditional values' such as space advantage, a good bishop, the principle of two weaknesses, and activity carry significant weight.



Motylev – Gashimov
Russia 2009

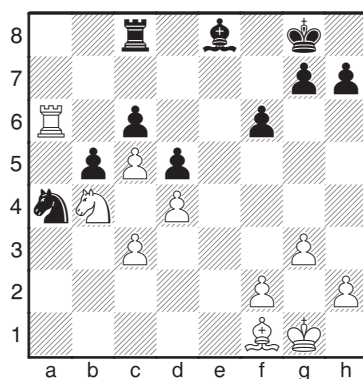


34...♙e8?

Here, the bishop is too passive.

After the better approach 34...♞c8, Black should be able to hold.

35.♞e1! ♞b2 36.♞c2 ♞a4 37.♞b4 ♞c8



38.♞a2?

With this retreat, White unnecessarily slows down his play.

Very strong was 38.♞a7! with the possible continuation 38...♞xc3 39.♙h3 ♞d8 40.♙f1 ♞e4 41.f4 ♙f8 42.♙e2±. (Motylev im CBM 131)

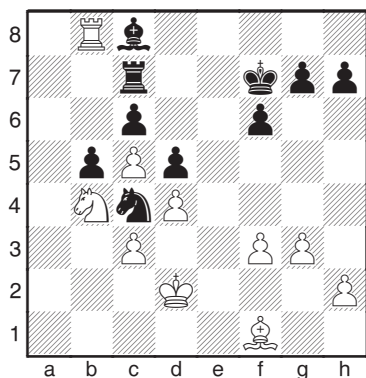
38...♞c7 39.f3 ♙g6?

39...♙f7 was better.

40.♞b4?

Instead of this further inaccuracy, 40.♞a8+! was clearly stronger; e.g. 40...♙f7 41.♞b4 ♞xc3 42.♞a6 ♞e7 43.♙g2 ♞e1 44.♞xc6±. (Motylev)

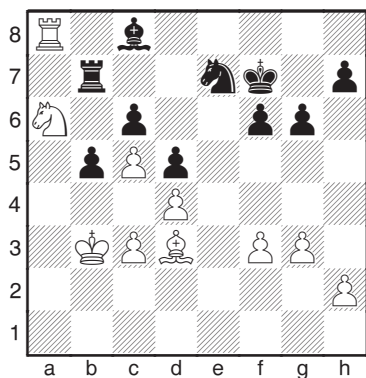
40...♙e8 41.♞a2 ♙d7 42.♙f2 ♙c8 43.♞a8 ♙f7 44.♙e3 ♙b7 45.♞b8 ♙c8 46.♙d2 ♞b2 47.♞b4 ♞c4+



48.♔c1

White correctly remains in the 'Carlsen endgame' with additional knights, as he has more options and correspondingly greater winning potential than in the 'Andersson endgame' after 48.♙xc4? bxc4.

48...♞e3 49.♙e2 ♞d7 50.♖a8 ♞f5
51.♞a6 ♖b7 52.♙b2 ♞e7 53.♙b3 ♙c8
54.♙d3 g6



55.♞b4

"I couldn't see how to improve the position after 55.♙b4 ♖d7 56.♙a5 ♖b7 57.♞b4 ♖c7. So I decided to follow the good advice from the books and open a second front." (Motylev)

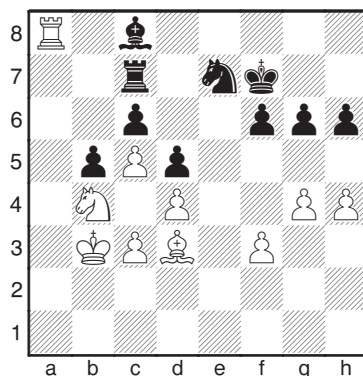
However, the same idea also works anal-

ogously after 58.g4 ♔g7 59.f4 ♔f7 60.h4 ♔g7 61.f5 g5 62.h5 ♔f7 63.♙xb5 cxb5 64.c6+-.

55...♖c7 56.g4!? h6

56...h5!? 57.gxh5 gxh5 58.♞c2± (Motylev)

57.h4



57...g5?

This makes White's task easier. As a defender, one should always handle pawn moves very carefully.

57...♙e6 was more tenacious.

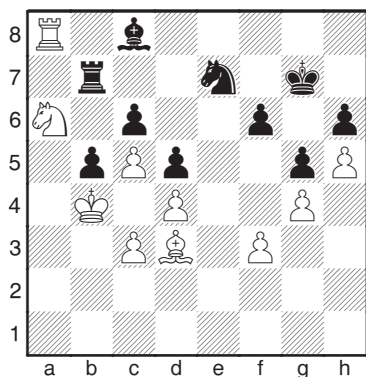
58.h5! ♔g7

After 58...f5, both 59.♙xf5+- and 59.♙e2 ♞g8 60.♞d3 +- win. (Motylev)

59.♞a6 ♖b7

59...♙xa6 60.♖xa6 ♔f7 61.♙f5!?+- (Motylev)

60.♙b4



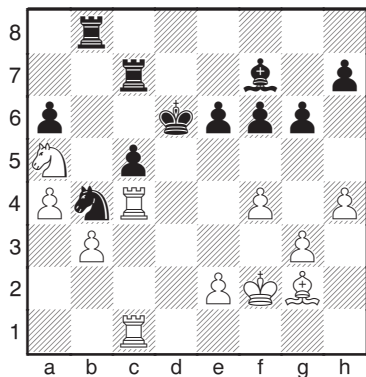
The king's penetration brings the decision.

**60...f5 61.♙xf5 ♕xf5 62.gxf5 ♜xf5
63.♗a5 ♜h4 64.♜b4 ♜xf3 65.♜xc6 g4
66.♜e5 ♜xe5 67.dxe5 g3 68.c6 ♜f7
69.e6 ♜f2 70.♜a7+ ♗f6 71.e7 ♜a2+
72.♗b4 ♜e2 73.c7 ♜e4+ 74.♗b3 ♜xe7
75.♜a6+ 1-0**

In the following example, the attacker also has a space advantage.



Aronian – Movsesian
Wijk aan Zee 2009



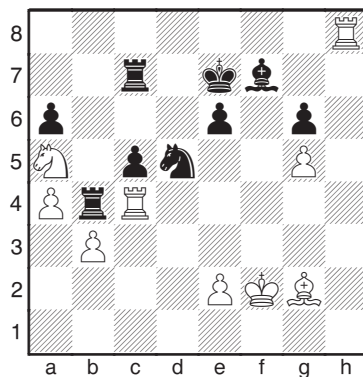
33.g4

"The classical way to increase a given positional advantage: To make progress, White must open a second front."
(Rogozenco in CBM 129)

33...h6?!

**33...e5 34.fxe5+ fxe5 35.♜4c3 ♕e6
36.♜c4+±**

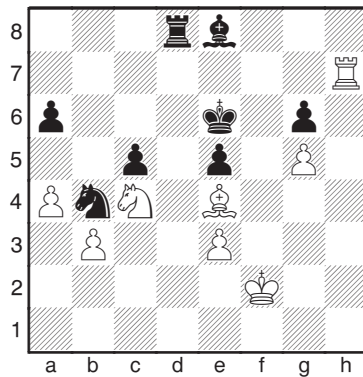
**34.g5! hxg5 35.hxg5 fxg5 36.fxg5 ♜d5
37.♜h1 ♜b4?! 38.♜h8 ♗e7**



39.♙e4

**39.♜xb4!? was also playable; e.g.
39...♜xb4 40.♙e4+- or 39...cxb4 40.♜a8
♜c5 41.♜xa6 ♜c7 42.♜c6+ ♗d6
43.♜b6+-.**

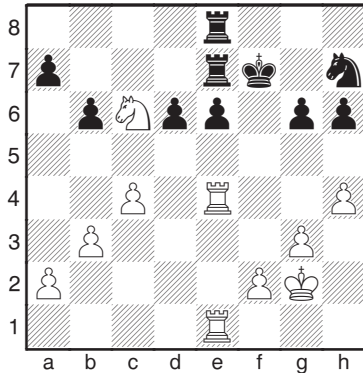
**39...e5 40.♜h7 ♗d6 41.e3 ♗e6 42.♙d3
♜b8 43.♜c1! ♕e8 44.♜ch1 ♜xh7
45.♜xh7 ♜b4 46.♙e4 ♜d8 47.♜c4**



Solutions

1) 37. ♖b5?

With this mistake, White misses the fairly straightforward winning move 37. ♖c6!.



Now White wins a pawn in one of the following lines:

– 37... ♖c7 38. ♖xe6! with the idea 38... ♖xe6 39. ♖d8+ +- (Nüsken)

– 37... ♖d7 38. ♖d1 (with the idea ♖e5+) 38... ♖g7 39. ♖ed4

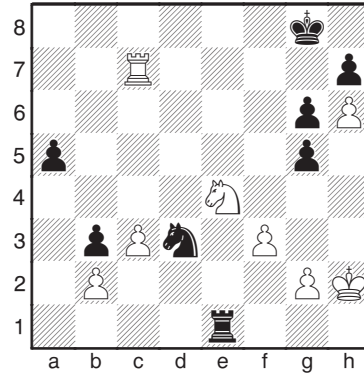
37... ♖d7 38. ♖f4+ ♖f6 39. ♖d1 ♖ed8 40. ♖fd4 d5 41. cxd5 ♖xd5 42. ♖f3 ♖e7 43. ♖c1 a6 44. ♖c3 ♖f8+ 45. ♖g2 ♖xc3 46. ♖xd7+ ♖xd7 47. ♖xc3 ♖f5 48. ♖f1 h5 49. ♖e2 a5 50. ♖f3 ♖d6 51. ♖c3 ½–½

2) Answer: Bringing the completely inactive knight into play!

37.f3!

By creating the outpost on e4, White enables the immediate activation of the knight. And since the following maneuver comes with mating threats, it even proves to be decisive.

37... ♖e1+ 38. ♖h2 b3 39. axb3 cxb3 40. ♖e4



After the knight steps onto the spring-board for the final assault, Black is hopelessly lost.

40... ♖xe4

40... ♖xb2 41. ♖f6+ ♖f8 42. ♖xh7+ ♖e8 43. ♖f6+ ♖d8 44. ♖g7 ♖d3 45. h7+–

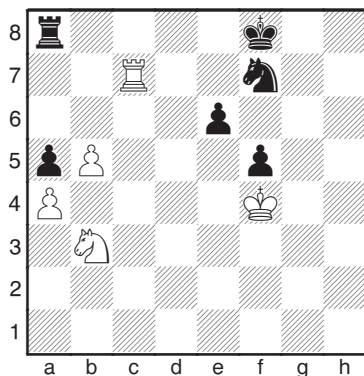
41.fxe4 ♖xb2 42.e5 ♖d3 43.e6 ♖f8 44. ♖xh7 1-0

Black resigned because White strikes first; for example, 44... b2 45. ♖f7+ ♖g8 46. h7+ ♖h8 47. e7 b1 ♖ 48. e8 ♖#.

3) 66. ♖c5?

With this mistake, White allows the opponent to use a fairly obvious knight fork.

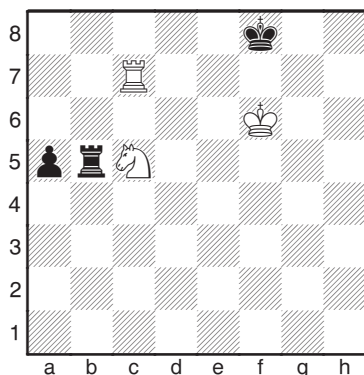
After 66. ♖c7!, however, White's activity should sooner or later lead to victory.



This is shown in the following lines:

– 66...♔g7 67.b6 ♕g6 68.b7 ♖b8
69.♜xa5 ♜d6 70.♙e5+–

– 66...♖b8 67.♜c5 e5+ 68.♙xf5 ♜d6+
69.♙xe5 ♜xb5 70.axb5 ♖xb5 71.♙f6!

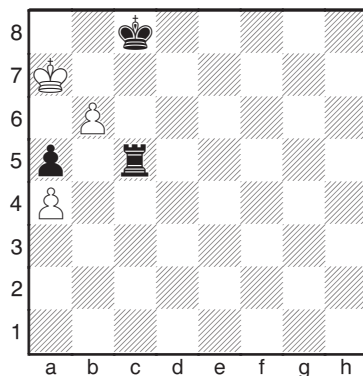


71...♙g8 72.♜e6 ♖b6 73.♖e7 ♖c6
74.♙g6 ♖c8 75.♖a7 a4 76.♖xa4 ♖b8
77.♜d4 ♖a8 78.♜d6 ♖b8 79.♜g5 ♙f8
80.♖e6 ♖b7 81.♜h7+ +–

**66...e5+ 67.♙xf5 ♜d6+ 68.♙xe5 ♜xb7
69.♜xb7 ♙e7 70.♙d5 ♙d7 71.b6 ♖h8
72.♜c5+ ♙c8 73.♙c6 ♖h6+ 74.♙b5
♖h5!**

The rook demonstrates its power.

**75.♙c6 ♖h6+ 76.♙b5 ♖h5 77.♙a6
♖xc5 78.♙a7**



78...♖c7+ ½–½

A funny finishing touch – though of course 78...♙d7 79.b7 ♖c8 etc. would have drawn in a similar way.

4) 47.♖d6!

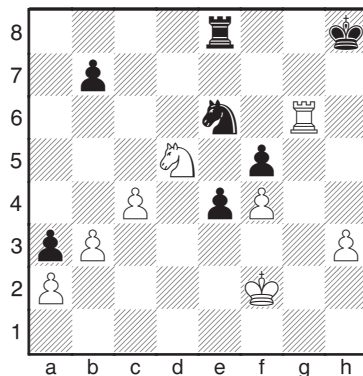
This strong move leads to victory.

Instead, after 47.♖b5? ♜h5 48.♜d5 g5=, Black would have counterplay.

47...♖e8

Now 47...♜h5 could be met with 48.♜d5+–.

48.♖xg6 ♜e6 49.♜d5



49...♜d4

49...e3+ 50.♜xe3 ♙h7 51.♖f6 ♜xf4
52.♜xf5 ♜d3+ 53.♙f3 ♜b4 54.♖h6+ ♙g8
55.♖g6+ ♙f8 56.♖g2 ♖e1 57.♜d4 ♖a1
58.♜c2+–

50. ♖b6 ♜c2

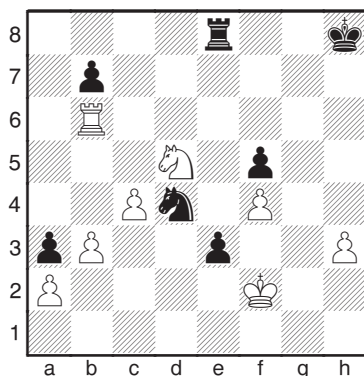
Even the alternative moves no longer save the position.

– 50...e3+ 51. ♜xe3 ♖e4 52. ♜d5 ♖e2+ 53. ♜g3 ♖xa2 54. ♖xb7 ♖b2 55. ♖a7 ♖xb3+ 56. ♜h4 ♜c6 57. ♖a6 ♜b8 58. ♖a8 ♜g7 59. ♜g5+–

– 50...♖b8 51. ♜e3+–

51. ♖xb7 ♖e6 52. ♖e7 ♖h6

After 52...e3+ ...



... the game could now take the following course: 53. ♜e2 ♜d4+ 54. ♜d3 e2 55. ♖xe6 ♜xe6 56. ♜xe2 ♜d4+ 57. ♜d3 ♜xb3 58. ♜c3 ♜c1 59. c5 ♜xa2+ 60. ♜d2+–.

53. c5 ♜d4 54. ♜g2 ♖g6+ 55. ♜f2 ♖h6 56. b4 ♖xh3 57. ♜g2 ♖h6 58. ♖b7 ♜g8 59. b5 ♜f8 60. b6 ♖g6+ 61. ♜f2 ♖h6 62. ♖c7 ♖h2+ 63. ♜g3 1-0

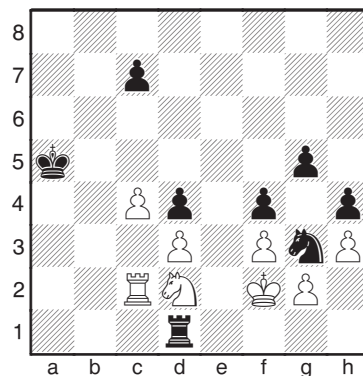
63...♖xa2 64. b7 ♖b2 65. ♜b6+–

5) With 53...♜g3! the active enemy knight is confronted with a dilemma in view of the checkmate threat ♖f1#: either be exchanged or retreat into complete passivity.

54. ♜d2

Of course, 54. ♜xg3 hxg3+ 55. ♜e2 ♖g1 –+ would be far too easy.

54...♖d1 55. ♖a2 ♜f7 56. ♖b2 ♜e7 57. ♖a2 ♜d7 58. ♖c2 ♜d6 59. ♖b2 ♜c6 60. ♖a2 ♜b6 61. ♖c2 ♜a5

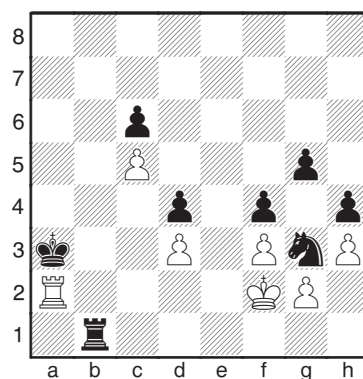


Now the king's infiltration will decide the game.

62. ♖b2 ♜a4 63. c5 c6 64. ♖a2+ ♜b4 65. ♖c2 ♜a3

White is in a deadly zugzwang.

66. ♜b1+ ♖xb1 67. ♖a2+



The last hope for a stalemate by means of the well-known 'suicide rook' trick – however, in this particular case, it can easily be parried.

67...♜b3 68. ♖a3+ ♜c2 69. ♖c3+!?

And one final stalemate attempt.

69. ♖a2+ ♖b2+–

Index of sources

Books:

Müller, K. & Engel, L.: The Human Factor in Chess, Joachim Beyer Verlag 2020

Müller, K.: Magnus Carlsen, The Chess DNA of a Genius, Joachim Beyer Verlag 2023

Müller, K.: The Best Endgames of the World Champions (Volumes 1 and 2), Joachim Beyer Verlag 2021/2022

Müller, K.: ChessBase Endspiel DVDs 9 und 10, Hamburg 2011

Dvoretsky, M.: 'Dvoretsky's Endgame Manual', 5th Edition 2020

Meyer, C.D. & Müller, K.: 'The Magic of Chess Tactics', (in book form: Russell 2002; as ChessBase DVD 2009)

Meyer, C.D. & Müller, K.: 'The Magic of Chess Tactics 2 (Intuition, Imagination & Precision)', (in book form: Russell 2017; as ChessBase DVD 2020)

Sadler & Regan: 'Game Changer', New in Chess 2019

Müller K. & Konikowski, J.: Karsten Müller - Endgame Magic, Joachim Beyer Verlag 2023

Müller K. & Konikowski, J.: Tactical Endgames, Joachim Beyer Verlag 2024

Meyer, C.D. & Müller K.: Magical Endgames, Joachim Beyer Verlag 2020

Electronic media:

Mega Database 2025

Müller, K., 'Endgame Corner' (www.ChessCafe.com)

Nalimov Endgame Tablebases

Periodicals:

ChessBase Magazin

ChessBase Nachrichten (www.chessbase.de)

NEW IN CHESS

Schachmagazin 64

www.schachbundesliga.de

About the author

GM Dr. Karsten Müller was born on November 23rd, 1970 in Hamburg. He studied mathematics and received his doctorate in 2002. From 1988 to 2015 he played for the 'Hamburger SK' in the German 'Bundesliga' and in 1998 he was awarded the title of Grandmaster.

The busy and globally recognized end-game expert was named 'Trainer of the Year' by the German Chess Federation in 2007



He is the author (or co-author) of the following highly esteemed works:

- Secrets of Pawn Endings (with Frank Lamprecht, Everyman/GAMBIT 2000)
- Fundamental Chess Endings (with Frank Lamprecht, GAMBIT 2001)
- Danish Dynamite (with Martin Voigt, Russell 2003)
- Chess Cafe Puzzle Book: Test and Improve Your Tactical Vision (Russell 2004)
- How to Play Chess Endgames (with Wolfgang Pajeken, GAMBIT 2008)
- Chess Cafe Puzzle Book 2: Test and Improve Your Positional Intuition (Russell 2008)
- Bobby Fischer, The Career and Complete Games of the American World Chess Champion (Russell 2009)
- Chess Cafe Puzzle Book 3: Test and Improve Your Defensive Skill! (with Merijn van Delft, Russell 2010)
- Chess Cafe Puzzle Book 4: Mastering the positional principles (with Alexander Markgraf, Russell 2012)
- The Magic Tactics of Mikhail Tal: Learn from the Legend (with Raymund Stolze, Edition Olms 2012)
- Fighting chess with Hikaru Nakamura (with Raymund Stolze, Edition Olms 2013)
- The slow (but venomous) Italian (with Georgios Souleidis, New in Chess 2016)
- The Magic of Chess Tactics 2 (with C.D. Meyer, Russell 2017)

His excellent series of ChessBase–DVDs Chess endgames 1–14 also attracted attention.

Müller's popular column Endgame Corner was published at 'www.ChessCafe.com' from January 2001 until 2015, and his column Endgames is published in Chess-Base Magazine since 2006.

To date, numerous of his books have been published by JBV Chess Books (Joachim Beyer Verlag) – a total of 27 in German and the following titles also in English:

- Magical Endgames (together with Claus Dieter Meyer)
- The Human Factor in Chess (together with Luis Engel)
- The Best Endgames of the World Champions Vol. 1 + 2
- World Chess Championship 2021 (together with Jerzy Konikowski and Uwe Bekemann)
- The Best Combinations of the World Champions Vol. 1 + 2 (together with Jerzy Konikowski)
- Bobby Fischer 60 Best Games
- Chess Training with Matthias Blübaum (together with Matthias Blübaum and Matthias Kreilmann)
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