

# THE CORRECT EXCHANGE IN THE ENDGAME

by

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# KEY TO SYMBOLS

!	a good move
?	a weak move
!!	an excellent move
??	a blunder
!?	an interesting move
?!	a dubious move
□	only move
=	equality
∞	unclear position
∞	with compensation for the sacrificed material
±	White stands slightly better
∓	Black stands slightly better
±	White has a serious advantage
∓	Black has a serious advantage
+-	White has a decisive advantage
-+	Black has a decisive advantage
→	with an attack
↑	with initiative
↔	with counterplay
△	with the idea of
▷	better is
≤	worse is
N	novelty
+	check
#	mate

# PREFACE

## OF THE 2<sup>ND</sup> EDITION

In the Informant 120 I published an article “Going for a pawn ending — calculate the right exchange”.

Having received much positive feedback, I considered writing a book on this subject: how to decide about the transition to a pawn ending. However recently an excellent book “Liquidation on the Chess Board” has been written by Joel Benjamin and this persuaded me to reconsider the general concept and change the subject to the exchange of pieces in the endgame.

When should we exchange a piece in the endgame and when should we keep it? Why is it so important? How to make a right choice? In this book we examine different types of endings and offer guidance to decide upon the correct decision. We will focus mainly on the exchange of pieces, not pawns. The exchange of pawns will be the subject of a separate book.

Going through the instructive examples and numerous exercises you will see all the important aspects of the piece exchange in the endgame, and enrich your knowledge and understanding of the final stage of the chess game. Trying to solve the positions, you will certainly improve your decision-making ability and analysing skills.

The first edition of the book was very well accepted by chess players of different levels. I am especially happy that many chess coaches and teachers found it useful for their training programme. The book was announced a silver winner of the Boleslavsky Award 2016 by the FIDE Trainer’s Commission. Together with Thinkers Publishing we decided to produce a second, extended edition. I hope it will be successful as well.

Eduardas Rozentalis  
October 2017

# INTRODUCTION

I would like to start with a complete game. The middlegame stage was very short in this game; it transposed to the endgame soon after the opening. This game will show us the connection between the first two stages and the endgame as well as the importance of the exchange. I have picked it because there were no any tactical complications and pure strategic ideas can be clearly seen.

▷ **E. Rozentalis**  
▶ **T. Wedberg**

New York, 1997

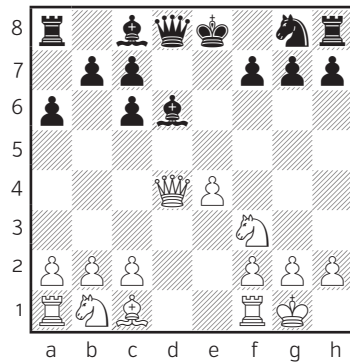
1.e4 e5 2.♘f3 ♘c6 3.♙b5 a6 4.♙xc6

This is the Exchange variation of Ruy Lopez. White exchanges his Bishop to change the black pawn structure. It is by far not the main variation of the Ruy Lopez but a quite popular opening among many players who cannot or do not want to study or play very complex and long variations. It does not promise White any essential advantage, but just gives solid and clear play. I used it practically my whole chess career and it delivered me many wins.

4...dxc6 5.o-o ♙d6

This is a side variation. However, we will not discuss the opening here, as our subject is exchanges and the endgame.

6.d4 exd4 7.♙xd4

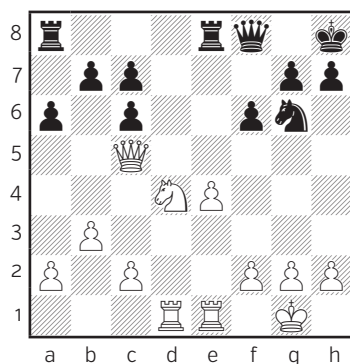
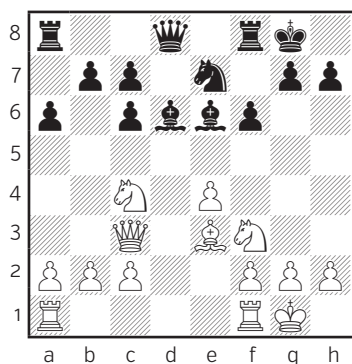


White achieved one of his main goals: he exchanged a couple of central pawns which gives him a clean pawn majority on the kingside, while Black's majority on the queenside is less striking as he has doubled pawns.

7...f6 8.♙e3 ♘e7 9.♘bd2 ♙e6  
10.♙c3

White wishes to move his Knight to c4, but the immediate 10.♘c4? would lose a pawn: 10...♙xh2+ 11.♙xh2 ♙xd4 12.♘d4 ♙xc4.

10...o-o 11.♘c4



White starts his simple plan: to exchange as many pieces as possible, meanwhile exploiting his pawn structure advantage.

11... ♖xc4?

My opponent, Grandmaster Wedberg, allowed me to implement this plan totally. He should have kept the Bishop and played 11... ♞g6.

12. ♖xc4+ ♔h8 13. ♖ad1 ♕e8 14. ♖c5 ♖xc5?

Once again, Black should not have exchanged the Bishop. 14... ♖d8 was the correct move, inviting White to exchange on d6 which would have improved Black's pawn structure.

15. ♖xc5 ♞g6 16. ♖fe1 ♖f7 17. b3 ♖fe8 18. ♞d4 ♖f8?

Voluntarily going for an endgame. White is more active and better, but the middlegame with Queens on the board would have given more chances for Black to equalize.

19. ♖xf8+ ♞xf8 20. f3

White has achieved a lot. He has an extra pawn in the centre, which one day he will be able to make good use of. As for Black's extra pawn on the queenside, it is doubled and much more difficult to use it in an efficient way.

20... ♖ad8 21. ♖f2

It's an endgame, so both sides can and should bring their Kings closer to the centre.

21... ♖g8 22. ♞f5 ♖f7 23. ♞e3 b5

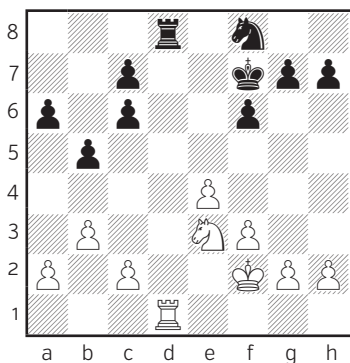
Of course Black should try to organize some play on the queenside, but this move also weakens his pawns.

He should probably have considered 23... a5 24. a4 b6 followed by ... ♞e6, re-locating the Knight to d4 or c5.

24. ♖xd8

The moment has come to exchange all Rooks.

24...♖xd8 25.♖d1



25...♖xd1?

Black exchanges the last Rook and finds himself in a probably lost position. He absolutely should have kept one Rook.

Better was 25...♖a8! after which Black preserves his chances to get some counter-play on the queenside.

26.♘xd1

After swapping so many pieces we now reached a Knight ending. White has a clear advantage in the form of an extra pawn in the centre, which allows him to organize a passed pawn. In his turn Black has very little chance of creating a passed pawn, as his pawns are doubled. The Knight endgame is strategically won for White. All he needs is an accurate and precise technique to bring home the full point.

26...c5 27.♖e3 ♖e6 28.f4

The white pawns are ready to move forward, seizing more space.

28...♘d7 29.♘b2

It is equally important to improve the Knight's location.

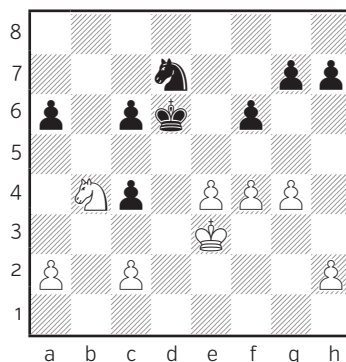
29...♖d6 30.g3

White is in no hurry.

30...♖e6 31.♘d3 ♖d6 32.g4

Time to move the pawn.

32...c4 33.bxc4 bxc4 34.♘b4 c6



35.a3!

Such endgames usually do not require long calculations, just two or three precise moves ahead should do the job. White prepares the way for his Knight heading towards a2-c3.

Of course, not 35.♘xa6? c5 and the Knight is trapped.



35...a5 36.♞a2 ♞b6 37.♞c3

We can see that the Knight is relocated excellently. It blocks the black pawn and restricts the black Knight.

37...c5 38.h4

Now the queenside is blocked. White can move his kingside pawns.

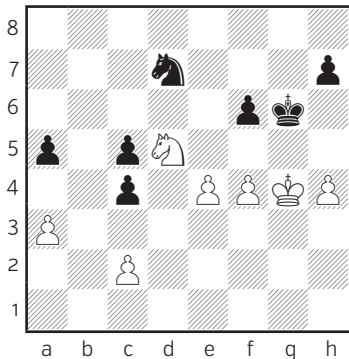
38...♙e6 39.♞b5 ♙d7 40.g5 ♙e6  
41.gxf6

White exchanges the pawns, thus making the black f- and h-pawns his future targets.

41...gxf6 42.♞c3

Black is in zugzwang and the white pieces are starting to penetrate his side of the board.

42...♞d7 43.♞d5 ♙f7 44.♙f3 ♙g6  
45.♙g4

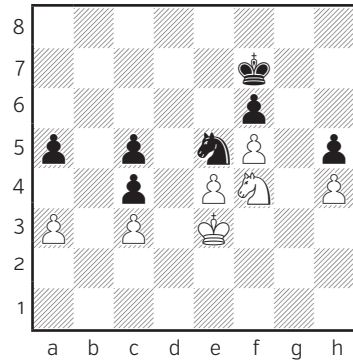


The white King goes forward compelling Black to move his h-pawn, which will become a real weakness.

45...h5+ 46.♙f3 ♙f7 47.♙e3 ♙e6  
48.f5+

With this move White prefers to win the black h-pawn instead of making a passed pawn in the centre.

48...♙f7 49.♞f4 ♞e5 50.c3



Once again White should not be in a hurry and should prevent any counter-play. Black wanted to play ...c4-c3, followed by ...♞c4. Now this door is closed for good!

50...♙e7 51.♞xh5 ♞d3 52.♞f4 ♞e1  
53.a4

The last accuracy. Black can't attack this pawn any more and is down-and-out.

1-0

This was a clear example of a strategic advantage which nicely demonstrated that White had good reasons to accept the exchange of every piece because after every simplification his winning chances were growing. Conversely, Black should have

avoided this at any cost or at least thought twice before exchanging a piece and determined which ones to keep. Therefore, we can now understand that while White had no difficulty solving this problem Black had a far more difficult task.

However, in many cases, the task is not as easy to solve as in this example and both sides have to be very careful when deciding to go for a simplification or keep the pieces on the board. Every piece exchange shifts the position dramatically, meaning this is a very important long-term decision. Quite often we reach an endgame while being in time-trouble. This makes our decision difficult as we don't have enough time to calculate long variations and we need to trust our intuition.

Every chess player can find many examples in his own practice. Often he needs extensive analysis to conclude if his decision in the game was correct or wrong. But such work always pays off in the long run.

This way we significantly improve our endgame understanding. Studying endgames of top players is also very useful. However, the games of the best world players can easily be found on every chess website and in chess magazines. Therefore, I decided to present to you some less well-known endgames. Mainly examples come from my own practice.

To avoid boring and dry commentary I also used several instructive positions from the excellent daily e-newspaper "Chess Today" from my good friend, Irish Grandmaster Alex Baburin. Alex, I owe you a drink or two!

The book consists of two parts: a theoretical part and a test.

In the first part we will try to work out the correct way of thinking about evaluating the exchange, calculating the exchange and deciding which piece, when and where we should or should not exchange. As I do believe a chessboard and pieces can speak better than pure words I will explain general ideas while analysing the concrete positions.

Every chapter also contains exercises. They correspond to the concrete items. First try to find the right decision yourself. Then we can discuss them and you will see how much you have learnt.

The test consists only of exercises, mainly more complicated than in the first part. They require a wide range of your endgame skills. It will allow you to check your abilities and enrich your endgame skills.

And now, my dear reader, let's start talking about the correct exchange in the endgame.

# CHAPTER 1.

## EVALUATION OF THE EXCHANGE

First of all, if we consider the possible exchange of a piece we have to evaluate the consequences.

What will we get as a result? Will our position really improve? Maybe by transposition we will reach a well-known theoretical position, or our pawn structure might be improved.

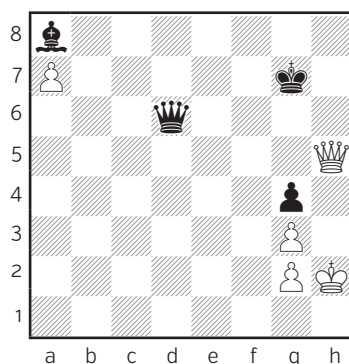
Let us have a closer look at the most common reasons for an exchange. And equally important, the opposite: why we sometimes should refrain from an exchange.

### Simplification in a better position

Quite often it is useful to exchange some pieces when we have extra material or a positional advantage, because then our opponent will have less counter-play.

▷ **E. Rozentalis**  
▷ **A. Weindl**

Stockholm, 1990



■

73... ♔h6

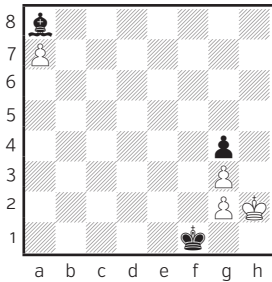
Black is a piece up and heads for some simplification by exchanging the Queens. But first of all he needs to evaluate the position arising after this exchange.

74. ♕h4

White in his turn, should notice that the exchange of the Queens leads to a lost position. Thus he has to avoid the simplification.

Let's check what happens after the exchange of the Queens: 74. ♕xh6+?

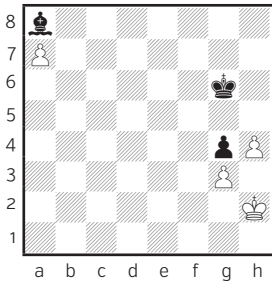
♔xh6 75. ♖g1 ♖g5 76. ♗f2 ♗f5 77. ♖f1  
 The white King cannot leave his g2-pawn unprotected as the black Bishop would capture it. 77... ♖e4 78. ♗f2 ♗d3 The black King goes forward, and sooner or later the white King will find himself in a zugzwang position. 79. ♖f1 ♖e3 80. ♖g1 ♖e2 81. ♖h1 ♖f1 82. ♖h2



82... ♗f2 White has to give up both pawns. (Of course, not 82... ♗xg2?? because of the stalemate after 83. a8 ♖ ♗xa8)

74... ♖g6

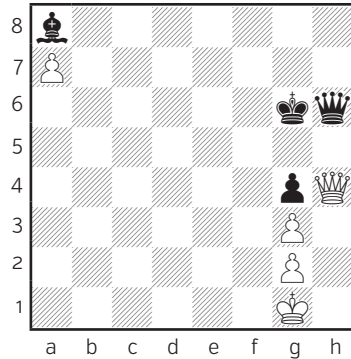
White's Queen is pinned, so Black can safely move his King. It would be a big mistake to exchange the Queens now without a proper evaluation of the position after 74... ♖xh4+?? 75. gxf4 ♖g6 76. g3



Only White can have some winning chances, as both black pieces are oc-

cupied at guarding two dangerous White passed pawns and the white King can assist those pawns.

75. ♖g1



Once more, White's only chance. Exchanging on h6 is losing, as we already discussed, while 75. ♖h1 allows the winning exchange 75... ♖xh4+ 76. gxf4 ♖h5, and White loses a pawn, as the g2-pawn is pinned and can't protect the pawn on h4.

75... ♖xh4?

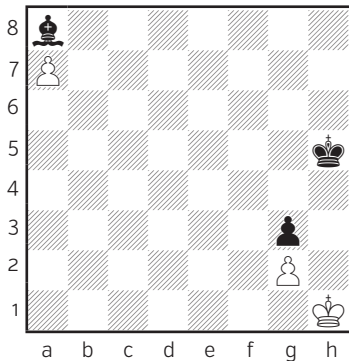
A bad evaluation or a lack of knowledge!

If Black didn't play so quickly and wrongly, he would have easily discovered the road to victory: 75... ♖e3+ avoiding the exchange 76. ♖f1 ♖e4 77. ♖h2 and White has to protect the pawn. But now his Queen is placed on a very passive square. After 77... ♗d5! the black Bishop comes closer to the white King and a mating attack is inevitable.

76. gxf4 g3

Most likely Black stopped his evaluation right here when analyzing the exchange. He thought that after capturing the h4-pawn he would have an easy win. But he was not aware that the position with an extra Bishop and a pawn on g2 versus a pawn on g3 is a theoretical draw.

77. h5+ ♖xh5 78. ♖h1



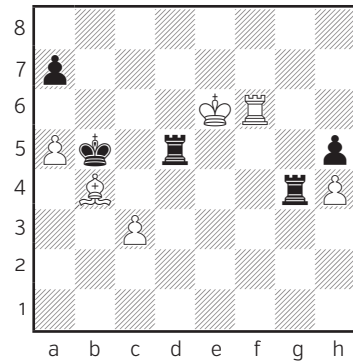
Black cannot win this position. White will be happy to give up his a7-pawn. The white King has a safe haven on the squares h1 and g1. And if the black King arrives to f2 or f1 it is stalemate.

78... ♖g5 79. ♖g1 ♖f4 80. ♖h1 1/2

Another example:

► **E. Schmittziel**  
► **E. Rozentalis**

Dortmund, 1993



White has a pawn for the exchange and some drawing chances.

50... ♖c4

Black activates his pieces and also wants to exchange Rooks. 50... ♖c6 would give White counter chances: 51. ♖e7+ ♖c7 52. ♖e6.

51. ♖f7

As his h4-pawn is hanging White has to attack the black pawn!

51... ♖e4+ 52. ♖f6 ♖f4+!

Black wants to exchange Rooks.

52... ♖xh4 53. ♖xa7 ♖f4+ would also give Black the better position but White would keep some chances in a sharp fight after 54. ♖g6 h4 55. ♖h7.

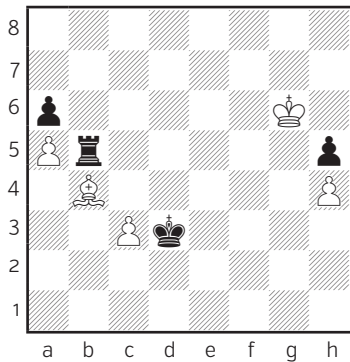
53. ♔g6 ♖xf7 54. ♔xf7 a6

A useful move. The black pawn should be on a light square because White owns the dark Bishop.

55. ♔f6 ♔d3

The black King is coming to the centre.

56. ♔g6 ♖b5



When he went for the rook exchange, Black evaluated this position as being close to winning. Of course not an easy win but also no any risk of losing, obviously as important in a practical game. In addition, his advantage is static. This means that he can try different plans while his advantage will not evaporate!

57. ♔f6 ♔e4 58. ♔e6

The Bishop is stuck, so only the white King can move.

58... ♖d5 59. ♔f6

59.c4 ♖d4-+

59... ♖f5+

The black pieces are well coordinated. They are masters of the light squares.

60. ♔e6

In case of 60. ♔g6, the black King marches to the h4-pawn: 60... ♔f4 61.c4 ♔g4 62.c5 ♖f4-+

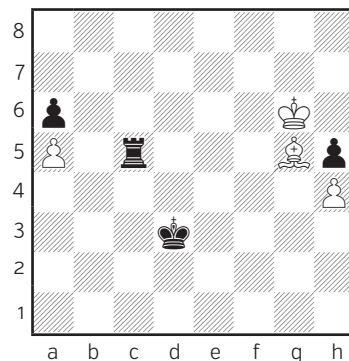
60... ♖f4 61. ♔e7 ♔d3

The black pieces start attacking the white pawns.

62. ♔g5 ♖a4 63. ♔d8 ♖c4 64. ♔f5

White is not able to protect all of his pawns, he now must attack a black one. 64. ♔f6 was losing as well: 64... ♖c5-+

64... ♖xc3 65. ♔g6 ♖c5 66. ♔g5



66... ♔e4!

The black King is approaching, intending to box in the white King if he captures the pawn on h5. This is much stronger and practical than

66... ♖x5 which is probably also winning after 67. ♖xh5 ♕e4.

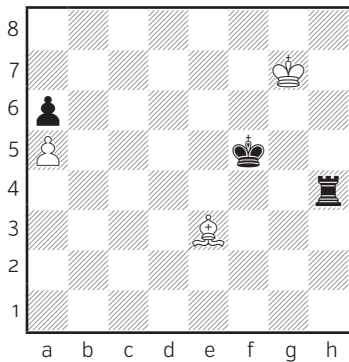
67. ♖xh5 ♖f5 68. ♖d2 ♖c8

We can see the difference between a Rook and a Bishop in an open position. The Bishop is restricted to the squares of its own colour and can operate only on the diagonals, while the Rook is very mobile on all the files and lines.

69. ♖h6

Otherwise, White loses his Bishop. For example: 69. ♖h6 ♖g8 70. ♖g5 ♖h8+ 71. ♖h6 ♖f6

69... ♖h8+ 70. ♖g7 ♖xh4 71. ♖e3



71... ♖e4

Once again, the Rook can cut off the white King while providing a safe route for his own King.

72. ♖b6 ♖e6 73. ♖f7 ♖e5 74. ♖d4+ ♖d5 75. ♖f2

75. ♖b6 ♖xb6 76. axb6 ♖c6 77. ♖e6 ♖xb6-+

75... ♖c6 76. ♖e3 ♖c4 77. ♖b6 ♖b5

White resigned. He cannot prevent the final exchange on b6, after which the pawn ending is lost because the white King is too far from the a-pawn.

0-1

## Simplification in an inferior position

If our opponent has the material or positional advantage, we might come closer to a draw by exchanging the correct piece. It can diminish the pressure or lead to a theoretical draw.

▷ R. Fontaine  
▶ E. Rozentalis

Istanbul, 2003

