

Understanding Rook vs. Minor Piece Endgames



Karsten Müller and Yakov Konoval

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versus
Minor Piece Endgames**

Karsten Müller

and

Yakov Konoval

Foreword by Alex Fishbein



2019
Russell Enterprises,
Inc. Milford, CT USA

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by Karsten Müller and Yakov Konoval

ISBN: 978-1-949859-11-9 (print)
ISBN: 978-1-949859-12-6 (eBook)

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Published by:
Russell Enterprises, Inc.
P.O. Box 3131
Milford, CT 06460 USA

<http://www.russell-enterprises.com>
info@russell-enterprises.com

Cover by Janel Lowrance

Printed in the United States of America



Table of Contents

Bibliography	5
Preface	6
Foreword by Alex Fishbein	7
The History of Creating Seven-Piece Endgame Tablebases	10
Chapter 1 Rook versus Knight Endgames	15
Chapter 2 Rook versus Bishop Endgames	47
Chapter 3 Rook versus Two Knights Endgames	110
Chapter 4 Rook versus Two Bishops Endgames	124
Chapter 5 Rook versus Bishop + Knight Endgames	137
Chapter 6 Rook + Knight versus Rook Endgames	162
Chapter 7 Rook + Bishop versus Rook Endgames	169
Chapter 8 Rook + Minor Piece versus Rook + Minor Piece Endgames	183

Chapter 9	
Endgame Studies	202
Solutions	204
Player Index	226
Index of Instructive Examples, Longest Wins and Composers	232

Preface

Knowing the abilities and limitations of the minor pieces and their cooperation with a rook is very valuable for mastering the secrets of the royal game and this can be studied best in the endgame. There are already many books dealing with the issue, so why have we added another one to the collection? Computer technology is getting all the time and it is advancing endgame theory.

Yakov Konoval and Marc Bourzutschky have created seven-piece tablebases and so the definitive verdict on all such positions and optimal lines are certainly known. Now seven-piece Lomonosov Tablebases are available online. They allow the evaluation of any given position. But Marc and Yakov have developed additional software which allows one to obtain additional interesting data automatically such as long wins, *zugzwangs*, typical positions, etc.. Thanks to this software, there are many new discoveries in this book.

As the previous two volumes in this series, *Understanding Rook Endgames* and *Understanding Minor Piece Endgames*, this volume follows a dual philosophy. We deal with the seven-piece endings in great detail. They are often so deep that pre-tablebase analysis almost always contains mistakes. Many new discoveries are revealed here. We have also added the important five- and six-piece endings a club player should know. But to really understand the fight of minor piece against and with rooks, these theoretical positions are of course not enough. So we have added subchapters on the principles of each material configuration. Finally we want to thank Vladimir Makhnychev and Victor Zakharov for assisting with access to the Lomonosov Tablebases and Alex Fishbein for his excellent foreword.

Karsten Müller and Yakov Konoval
March 2019

Foreword

When I was growing up, my bedtime story books included Averbakh's endgame books. Today, German grandmaster Karsten Müller is no less an endgame authority and connoisseur than Averbakh back in the day. Karsten Müller's latest work, *Understanding Rook and Minor Piece Endings*, co-written with Yakov Konoval, is especially interesting because of the variety of the positions it covers. The book before you now will take you into a mysterious and charming world. The actors in these fairy-tale stories are the rook, the bishop, and the knight.

As an endgame junkie myself, I agree with José Raúl Capablanca that the student should start with study of the endgame, before the opening and middlegame. But why is that? And, more importantly, how should you study the endgame and what do you need to gain from that study?

For me, a valuable endgame lesson is one where I come away with a deeper understanding of, or rather a deeper feeling for, what the pieces can do. I want the pieces to come to life before my eyes, so that I know when they are strong and when they are weak, when they should be sacrificed for a higher purpose or when they deliver the crushing blow. Positions with minimal material offer the best glimpse into the geometry of the chessboard. When only the rook and knight remain, for example, it is easier to see who they really are. That is why I study the endgame.

Karsten Müller offers many such lessons in this book. He starts, in fact, with the rook vs knight pawnless ending, and shows that it is not as simple as commonly thought. I was surprised how often even very strong grandmasters made mistakes in what looks like a "book" position, and I learned something about what to do with the knight when it is in danger of ending up on the vulnerable g2 (or g7, b2, b7) square.

My least favorite part of endgame study is memorization of exact positions. I almost never do it! I have seen many books that classify their material into an endless set of exact positions, most of which will probably never occur in your games. Müller is very careful to avoid this pitfall. He has structured the book around ideas rather than theoretical positions. To be sure, there are a couple of cases where the position and method need to be memorized, and on those rare occasions he makes a point to note that. But most examples are real-life games (not even endgame studies), where actual humans play, often making mistakes. A lot of positions are borderline cases, straddling between a win and a draw, and that is where the struggle between the pieces becomes the most fascinating and instructive.

Understanding Rook versus Minor Piece Endgames

There were quite a few revelations for me in this book. For example, the rook vs. bishop fortress with pawns on one side is not as easy to hold as I had been taught (position 02.58) or it can be altogether losing (position 02.60). There is long analysis which you are not going to remember, and on no account should you try to memorize it. Sometimes there are not any obvious generalizations to be made. But positions with no clear guidelines are perhaps even more valuable than positions in which everything can be broken down logically. When you study these border cases, you will improve your endgame intuition and come closer to the stage where the pieces and their possibilities become second nature to you. And besides, positions with a real struggle occur more often than positions where everything is already well known.

From a point of view of the relative value of the pieces, it was interesting to me that the rook and two connected pawns win against the two bishops when they sometimes have trouble winning against the bishop and knight (I thought the two bishops worked well together in the ending!) The strength of the rook is also illustrated in its ability to defend successfully against the knight and two or even three passed pawns.

Karsten Müller is undoubtedly well known to many readers of endgame books, as the grandmaster who has analyzed many historically important games and that analysis has appeared in many places. He has even analyzed one or two of my endgames, and I have asked him for his opinion on my play and analysis. His co-author, Yakov Konoval, is not as renowned. But his contribution to this book is crucial, and this brings us to another key distinguishing quality of the book you are about to read.

Of course, the 21st century has seen a revolution in analysis of chess in general, and of endgames in particular. For a long time, authors had to perform painstaking work on their own, or rely on established sources, and still could not avoid mistakes, even in positions with a small number of pieces. But about 15 years ago, the six-piece endgame tablebase became available to everyone on the internet. That means that any position with six or fewer pieces on the board (including kings) was solved exactly, for whether it is a win (and in how many moves) or a draw. More recently, the seven-piece tablebase has become available. Yakov Konoval is a programmer who has not only worked on tablebases but has also created methods to use the computer to find critical positions and improvements to previous theory. His status as co-author reflects the importance of the computer in the study of endgames today.

However, many endgames are not solved yet (for now). This book features some of the best examples of play in which there are many pieces and pawns on the board. Once you have learned how the rook and knight, or rook and bishop, relate to one another, you will learn how to tell whether the rook and bishop will work better than the rook and knight in a given position. Many endgame books define their scope to positions with only one piece on each side, or at most two pieces on one side and one piece on the other. Karsten Müller shows both positions with a relatively empty and relatively full board. The result, again, is a better practical value of the book as a whole.

If you enjoy beauty in chess, if you want to improve your handling of the endgame, and if you want to become closer friends with the rook, bishop, and knight on the chessboard, then this journey into the land of rook and minor piece endings will reward you.

Grandmaster Alex Fishbein
New Jersey
June 2019

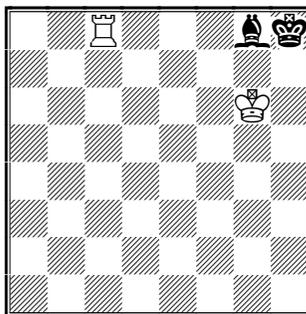
Chapter 2

Rook versus Bishop Endgames

The rook is much better than the color-blind bishop. Often it starts a powerplay on the color complex the bishop cannot control. But the pawnless ending usually is drawn nevertheless.

(a) The pawnless ending

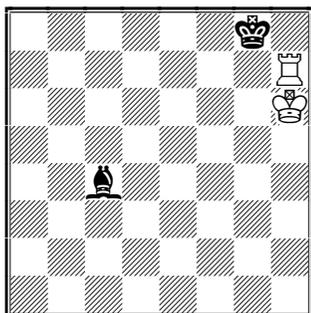
This is generally a draw. The rook only has chances if the defending king is very badly placed. The main exception is when the defending king is cut off in the dangerous corner, the one which the bishop can control. If the defending king is in a safe corner it is usually drawn, but the following trick is worth knowing:



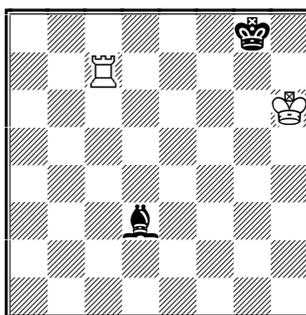
Now Black has taken the typical drawing defensive set up. 59.♖c1 ♕h7+ 60.♜f6 ♘g8 61.♞h1+ ♙h7 62.♞h2 ♜g8 63.♞b2 ♜h8 64.♜f7 ♘g8+ 65.♜f8 ♙h7=; 56...♙d3=

02.01 Sachdev – Schut

Wijk aan Zee 2012



56.♞c7!? ♕e6? Black falls into the trap. 56...♙b3 draws, e.g., 57.♜g6 ♜h8 58.♞c8+ ♘g8



With secure control over the g6-square, there is an alternative drawing formation.

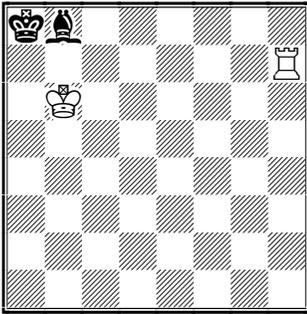
57.♜g6! ♜h8 57...♙h3!? is refuted by the surprising 58.♞e7!! when the rook wins the dominance duel: (58.♞f7? ♘g2 59.♞e7 ♘c6 60.♞e6 ♙a4=) 58...♜f8 59.♞e5 Now the bishop

Understanding Rook versus Minor Piece Endgames

cannot come back to a good diagonal, e.g., 59...♔g2 60.♖f6 ♔f3 61.♖f5 ♔c6 62.♖c5 ♔d7 63.♖h5 ♖g8 64.♖g5+ ♖f8 (64...♖h7 65.♖g7+-; 64...♖h8 65.♖f7+-) 65.♖g1 ♔c8 66.♖c1 ♔d7 67.♖b1 ♖e8 68.♖b8+ ♔c8 69.♖xc8+ ♖ 58.♖h7+! 58.♖e7? ♔g8= 58...♖g8 59.♖e7 1-0

02.01A Instructive Example

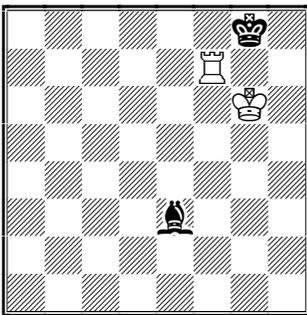
So one of the best tries against a defense in the safe corner is the following:



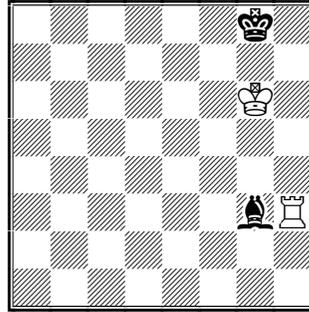
1.♖e7!? This sets a trap, which is especially good if the clock is on the queenside and Black is short of time. 1...♔d6? 1...♔f4, 1...♔g3 and 1...♔h2 draw. 2.♖a7+ ♖b8 3.♖d7+-

The following set up is the main exception:

02.02 Breyer – Tarrasch Berlin 1920



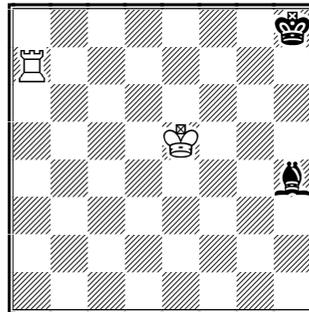
The attacker always wins, if the defending king is securely imprisoned in the dangerous corner: 1...♔g1 2.♖f1 ♔h2 3.♖h1 ♔g3 4.♖h3



The rook forces the bishop to leave the shadow of the kings. 4...♔d6 4...♔f4 5.♖c3 ♖f8 6.♖f3+- 5.♖d3 ♔e7 5...♔c7 6.♖c3 ♔d8 7.♖c8+- 6.♖c3 and Dr Tarrasch resigned because of 6...♖f8 7.♖c8+ ♔d8 8.♖xd8+- This winning position was discovered by Kling and Horwitz in 1851.

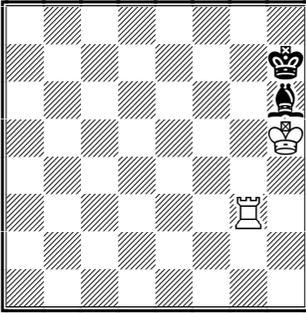
Exercises

E02.01 V.Platov 1925



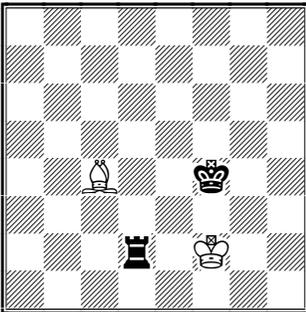
White to move and win

E02.02 V.Platov 1925



Find the right square for White's rook!

**E02.03 Yang Kaiqi – Motylev
Shanghai 2010**

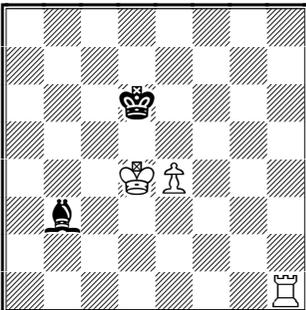


How to defend?

(b) ♖+♗ vs. ♘

This is usually won, but a few exceptions are worth knowing. We start with a principled case:

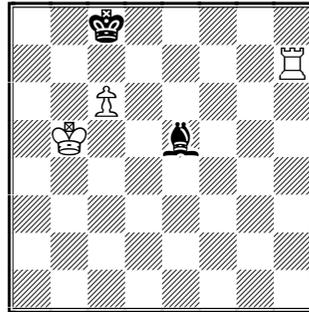
02.03 Instructive Example



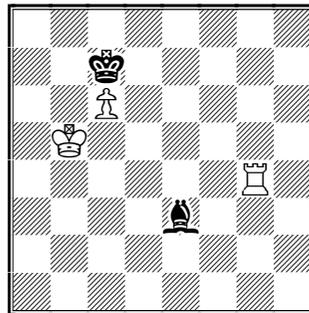
1.e5+?! This premature advance makes it quite difficult as it blocks the king's road through the center. 1.♖h6+ ♘e6 2.♖g6 ♖d7 3.♗e5 ♘c4 4.♖g7+ ♖c6 5.♗f6+- wins much easier. 1...♗e7 2.♖b1 ♘f7 3.♖b7+ ♗e6 4.♖b6+ ♗e7 5.♗e4 ♘c4 6.♖b2 ♘g8 7.♖b7+ ♗e6 8.♗f4 ♘f7 9.♖b6+ ♖d7 10.♗f5+-

Now important exceptions follow:

02.04 Del Rio 1750

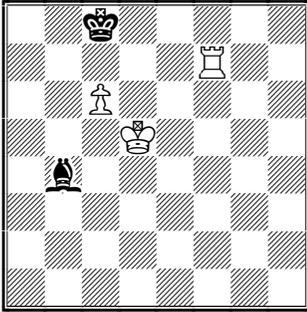


White's c-pawn has advanced too far and blocks the king's road and so surprisingly White cannot win. **1.♗b6 1.c7** is met by **1...♗b7!= 1...♘d4+!** **2.♗b5 ♘e5!** However, not **2...♗b8?** **3.♖h5 ♘f2 (3...♗c7 4.♖g5 ♘e3 5.♖g4 ♗b8 6.♗c4 ♗c7 7.♗d5 ♘h6 8.♖b4 ♘e3 9.♖h4 ♘g5 10.♖h7+ ♗c8 11.♖f7 ♘d2 12.c7 ♗b7 13.♗d6 ♘a5 14.♖g7 ♘b6 15.c8♗+ ♗xc8 16.♗c6+-) 4.♖g5 ♘e3 5.♖g8+ ♗c7 6.♖g4**

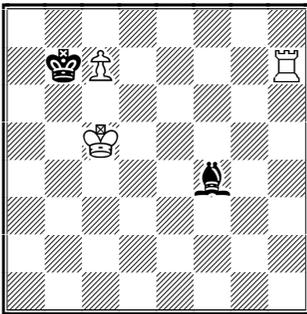


Understanding Rook versus Minor Piece Endgames

The bishop cannot return to the diagonal h2-b8. 6...♖c8 7.♗c4 ♖c7 8.♗d5 ♗h6 9.♖b4 ♗e3 10.♖h4 ♗f2 11.♖h3 ♗e1 12.♖f3 ♗b4 13.♖f7+ ♗c8



14.c7 ♖b7 15.♗e6! ♖c8 16.♖h7 ♗a3 (16...♗a5 17.♗d6 ♖b7 18.♖f7 ♗b6 19.c8♖+ ♖xc8 20.♗c6!+-) 17.♗d5 ♖b7 18.♖h3 ♗e7 19.c8♖+ ♖xc8 20.♖c6+- **3.♗c5 ♗f4 4.c7!?** 4.♗d5 ♗g3 5.♖f7 ♗h2! 6.♗c5 ♗g1+ 7.♗b5 ♗h2!= **4...♗b7!**

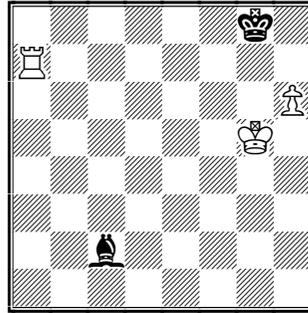


The point of the defense. **5.c8♖+** 5.♗b5 ♗g3= **5...♗xc8 6.♗c6 ♖b8 7.♗b6 ♗a8=**

02.05 Instructive Example Pawn on h6

With a rook's pawn, the rule is as follows: When the bishop can control the promotion corner square, then the rook wins easily as the rook's pawn can later even be given up to reach winning position 02.02. When the bishop cannot

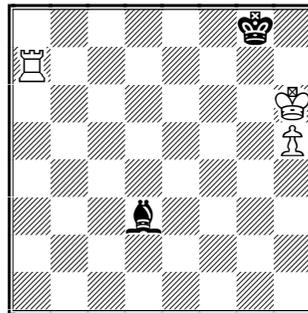
control the corner, it is much more difficult. When the rook's pawn has crossed the middle of the board it is usually drawn because of the following fortress set-ups:



Black's king stays on g8,h8 and h7 and the bishop on the b1-h7 diagonal: **1.♗f6 1.♖a8+ ♖h7= 1...♗h8** Even 1...♗d3 2.h7+ ♖h8 draws. **2.h7 ♗xh7=**

Even with the pawn on h5 it is drawn:

02.06 Instructive Example Pawn on h5



Black's bishop stays on the b1-h7 diagonal and the king on f7,f8 and g8: **1.♖g7+ ♗f8!** 1...♖h8? 2.♖d7 ♗c4 3.♖d8+ ♗g8 4.♗g5 ♗g7 5.♖d7+ ♖h8 6.♗g6 ♗b3 7.♖h7+ ♖g8 8.♖c7 ♖h8 9.h6 ♗d5 10.h7 ♗e4+ 11.♖h6 ♗f5 12.♖e7 ♗g6